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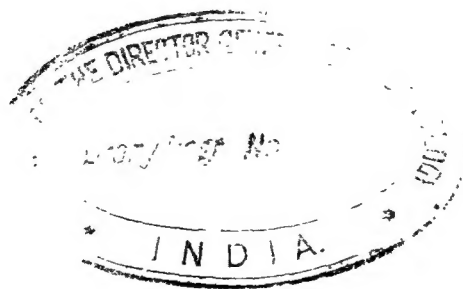
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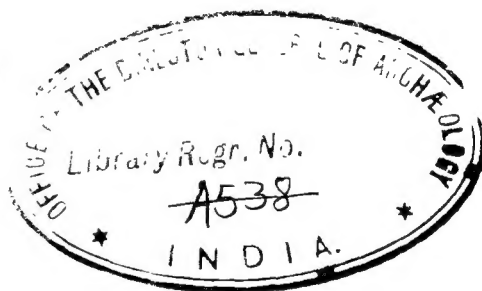


THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES

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OF
HELLENIC STUDIES

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A NEW STELÈ FROM ATHENS.

[PLATE I.]

1.

APPARENTLY there had been sculptured on the missing half of the marble stelè lately acquired by the British Museum from Athens a seated figure with hand upraised (Pl. I.). There is a trace of the raised arm and also of a footstool. The subject had therefore been one of those scenes of parting or meeting so common on Athenian stelae. But the young man leaning on his staff is not of the usual Athenian type. In several respects he resembles a youthful Heracles on a relief from Mt. Ithome now in Athens,¹ which figure it has been the custom to regard as Polycleitan (Fig. 1). So far as the pose of the head and the Diadumenos-like modelling of the body are concerned that opinion may be right. Only we must remember that the somewhat formal modelling of the thorax both in the Ithome relief and the new stelè is not unfrequent in Greek art, at least from the time of Lysippos onwards. A familiar instance is the Hermes on the sculptured drum of a column from Ephesus in the British Museum. It is a modification of the type of Polycleitos and may have set in much earlier than Lysippos. It may even have extended to Athens.

In the Ithome relief Heracles leans forward on his club; in ours the young man leans on his staff as in the so-called conversation-scenes on vases of the best time, *e.g.* the kylix, E 59 in the British Museum. On our lekythos E 698 is a young huntsman standing with right hand on his side and head poised much as in the new relief. As compared further with the Ithome relief, the bodily forms of the new figure are rendered with greater definition, and the main outlines are more precise. The contrasts between nude form and drapery are more finely balanced. The whole bearing of the figure is more attractive. The surface is on the whole well preserved, though there is a good deal of incrustation which has become fossilized, so to speak, on the marble. The height of the stelè is 1 ft. 11½ in.

¹ Outline in Schoene, *Gr. Reliefs*, Pl. 27, No. 112: cf. Kekulé, *Bildwerke im Theseion*, No. 374.



FIG. 1.—SACRIFICE TO HERACLES. IN ATHENS; FROM MT ITHOME

2.

I am permitted to add here some remarks on a stèle of a different kind.¹ It is one which occurs amid the reliefs on a moulded vase of black ware acquired some years ago by the British Museum from Thebes. The vase is of the class generally known as 'Megarean bowls'. The subject of the reliefs is the Rape of Proserpine (Fig. 2). It is a familiar subject, but in this

¹ I have to thank Miss Godden for the drawing of this vase.

instance there are peculiarities which deserve notice. First of all there is the stelè. It is placed so as to separate two stages of the myth, the one transpiring on earth, the other in Hades. On the right of the stelè is seen the chariot of Pluto approaching, preceded by Hermes and followed by the irate goddesses, Demeter, Athenè, Hecatè and Artemis. On the left of the stelè are the reeds of Acheron and beyond them two of the Danaïdes with their pitchers. The stelè is inscribed ΕΥΣΕΒΩΣ and must therefore be regarded as indicating the entrance to the abode of the blessed (τῶν εὐσεβῶν λειμῶνες¹). It represents the "Αἰδου πύλαι which figure in early Christian² as well as in classical literature. At the same time it is to be distinguished from the exit from the face of the earth which was conceived otherwise. In Sicily the exit was through a cave. On a fragmentary vase



FIG. 2.—MEGARFAN BOWL FROM THÈBES. IN BRIT. MUS. (Dianl. 7 iii.)

from Eleusis the chariot of Pluto is seen plunging down into the earth, half lost to sight, through a sort of χάσμα γῆς.³ On a fresco of the Catacomb of St. Praetextatus at Rome illustrating the journey after death of Vibia, the wife of a priest of Sabazios, under the guise of the Rape of Proserpine, we have in the first scene the chariot of Pluto approaching a round hole in the earth to which Hermes conducts it. At a later stage Vibia appears being led through an archway—a hollow stelè in fact—by an *angelus bonus* towards a banquet of the blessed.⁴

¹ *Orphic fragments*, No. 153 (ed. Abel).

² *C.I.G.*, 8721.

³ *Athen. Mittheilungen* xxi. Pl. 12. Compare

the *Homeric Hymn to Demeter*, 4, 16. . . χάνε δὲ χθὼν εὐρύαγνα.

⁴ Maass, *Orpheus*, p. 19

When Persephonè arrived in Hades she was believed to have found meadows there as rich and flowery as those of Henna from which she had been so rudely carried off.¹ These flowery meadows are made the most of on the vase. It does not appear, however, that the scene of the chase—two hares and two hounds—under the chariot of Pluto and therefore on earth, is continued in the meadows of the lower world. As compared with the two swans in the terrestrial scene, we find only one in Elysium.

The arrival of Persephonè in Hades was associated with the *Theogamia*,² and bearing this in mind we at once recognize the boy amid the reeds of Acheron playing on his flutes as a type of the boy who led the way in marriage processions as we see, among other instances on our white pyxis D II, where the boy marches busily playing his flutes.³ But this boy among the reeds, though dressed in the ordinary manner, has two small horns on his forehead. He is therefore a young Pan. Reeds are a natural enough environment for Pan and from his association with nymphs it was perhaps an easy step to connect him with the marriage of Persephonè. But so far I have not been able to find any mention of that circumstance in ancient literature. A mask of the goat-headed Pan appears under the stelè.

A. S. MURRAY.

¹ Claudian, *De Raptu Proserpinae* li. 287 :

Ze phytis illic melioribus halant

propterea flores quos nec tua protulit Henna.

See also *Idem* vi. 640 :

lucior hic campos aether et lumine vestit

purpureo, solenque suum, sua sidera norunt.

² R. Foerster, *Raub und Rückkehr* p. 242, and *Philologus* Supplement-Band iv. p. 646.

³ *Wich Atheniana Vases*, Pl. 20. Cf. *Anth. Pal.* xvi. (*App. Plon*) 177 :

σοὶ Παιῶν φίλος ἦν καὶ ὁ χρυσοκόμης Ὑμεναῖος,
καὶ λιγυρῶν ἀνλῶν ἡδυμελεῖς χάριτες.

THE GONG AT DODONA.

'Sounding brass or a tinkling cymbal.'—I. Cor. xiii. 1.

THE Greeks had a proverb which compared talkative persons to 'the gong at Dodona.'¹ Menander (342–291 B.C.) in his *Aspis*² made one of his characters remark :

'Give this creature Myrtile the merest touch or simply call *nurse*, and there's no end to her talking. To stop the gong at Dodona, which they say sounds all day if a passer-by lays a finger on it, would be an easier job than to stop her tongue ; for it sounds all night as well.'

A fragment of Kallimachos³ (c. 310 c. 240 B.C.) implies the same proverb :

... 'lest it might be said that I was but awakening the echoes of the bronze at Dodona.'

Aelius Aristides (129–189 A.D.) in his encomium on the four great statesmen of Athens⁴ observes : 'When it becomes necessary to vituperate

¹ Zepheri, *l.* 5 τὸ Δωδωναῖον χαλκεῖον ἐπὶ τῶν πολλὰ λαλούντων καὶ μὴ διαλείποντων. Diogen. 8, 12 τὸ Δωδωναῖον χαλκεῖον ἐπὶ τῶν πολλὰ λαλούντων. Hier. Cyr., vol. Mosq. 2 81 Δωδωναῖον χαλκεῖον ἐπὶ λάλου. Men. 1, 3 12 Δωδωναῖον χαλκεῖον ἐπὶ τῶν ἀδολέσχων καὶ φλυαρῶν. Aristot. *l.* 13 Δωδωναῖον χαλκεῖον ἐπὶ τῶν ἀκαταπαύστων καὶ πολλὰ λαλούντων (*l.* 10), οἷα, καὶ πολλὰ. Suid. Δωδωναῖον χαλκεῖον ἐπὶ τῶν μικρολογούντων (Probus *l.* 107, μακρολογούντων). Steph. Byz. *s.v.* Δωδώνη, Δωδωναῖον χαλκεῖον ἐπὶ τῶν πολλὰ λαλούντων. Eustath. *l.* 1, 150, Δωδωναῖον χαλκεῖον ἐπὶ τῶν πολλὰ λαλούντων. Schol. Philostr. ab. O-sanno in Auct. Lex. Gr. 14 voluit ἐπὶ τῶν πολυλόγων, τὸ πλέον τοῦ ἐν Δωδώνῃ χαλκεῖου λέγειν.

² Quoted by Steph. Byz. *s.v.* Δωδώνη. Cp. Zepheri, *l.* 5 τὸ Δωδωναῖον χαλκεῖον κείται παρὰ Μενάνδρῳ ἐν τῷ Ἀρηφόρῳ (τῇ Ἀρήφῳ) Meineke, Suid. *s.v.* Δωδωναῖον χαλκεῖον κέχρηται δὲ τῇ ποροίᾳ Μενάνδρῳ Ἀλλητρίδι (Ἀλλητρίσι V. C.). It appears from Athen. 10,

412b, 13 559c, that the Ἀλλητρίς was another name of the Ἀρηφόρος. For the text of the fragment I follow Meineke (*l.* 3).

³ Quoted by Steph. Byz. *s.v.* Δωδώνη, where the MSS give τῶν ἐν Δωδώνῃ λεγόμενον οὐκ ἐκ χαλκῶν ἤγειρον. Bentley c] τὸν ἐν Δωδώνῃ λελεζμένον οὐνεκα χαλκῶν ! ἤγειρον. Schneider Coll. ii. 526 notes that the first line is quoted by Chalcidius *dictat. in Theodos.* p. 418, 18, cp. *ib.* 161, 5 ; 116, 4 ; 273, 35 ; 290, 30, Bekk. *anecd.* p. 1228. Lascaris p. 1124, and is thus enabled to restore the true reading μὴ με τὸν ἐν Δωδώνῃ λέγει μόνον οὐνεκα χαλκῶν ἤγειρον. He follows Becker in supposing that the bug occurred in the Prologue to the *Aspis*, and that the poet meant 'non omnia se quae a Musis ac quae sit profusum, ne gurgitum tantum se vocet quisquam.'

⁴ Arist. ὑπὲρ τῶν τεττάρων 309 ἐπειδὴν δὲ κακῶς τινὰς εἰπεῖν δέη καὶ καταβαλεῖν, τῷ Δωδωνίῳ μὲν οὐκ ἂν εἰκάσαις αὐτοὺς χαλκεῖν.

and attack your opponents, you would not compare them to the Dodonaean gong.' Later still the sophist Prokopios¹ (+50-513 A.D.) wrote: 'we have become a veritable Dodona gong.' And an anonymous grammarian in Cramer's *anecdota*² says: 'your babble drowns the gong at Dodona.'

The proverb, then, was sufficiently well known for close upon a thousand years. But when we enquire—what precisely was this famous gong?—we are confronted with a tangle of different explanations. In the following pages I shall attempt to ascertain (1) the form, and (2) the function of the gong in question.

(1) THE FORM OF THE GONG AT DODONA.

In discussing the rival views that have been propounded with regard to the shape of the gong it will be convenient to present in tabular form the evidence of scholiasts and lexicographers before proceeding to comment upon them.

Steph. Byz. *s.v.* Δωδώνη. p. 165, 11 ff. Dindl. ἔστι δὲ καὶ Δωδωναῖον χαλκεῖον παροιμία ἐπὶ τῶν πολλὰ λαλούντων, ὡς Μενεδήμων φησὶν. ἀπὸ τοῦ τὸν ναὺν τοῦ Δωδωναίου Διὸς τοίχους μὴ ἔχοντα, ἀλλὰ τρίποδας πολλοὺς ἀλλήλων πλησίον. ὥστε τὸν ἐνὸς ἀπτόμενον παραπέμπειν διὰ τῆς ψαύσεως τὴν ἐπήχησιν ἐκάστω, διαμένειν τὸν ἦχον ἄχρις αὐθις τοῦ ἐνὸς ἐφάψεται.

(We should, I think, read ὡς μὲν Δήμων φησὶν, ἀπὸ τοῦ τὸν ναὺν τοῦ Δωδωναίου Διὸς τοίχους μὴ ἔχειν, ἀλλὰ and also διαμένειν δὲ τὸν ἦχον ἄχρις αὖν αὐθις.³)

Apostol. 6. 43 Δωδωναῖον χαλκεῖον ἐπὶ τῶν ἀκαταπαύστως καὶ πολλὰ λαλούντων. Δήμων μὲν φησὶν, ἐν τῇ Δωδώνῃ πολλοὺς παραλλήλους κειμένους λέβητας, ὅταν τις ἐνὸς ᾄψεται, ἐκ διαδοχῆς πάντας ἡχεῖν.

Cod. Coslunianus 177ⁿ ἐπὶ τῶν ἀκαταπαύστως λαλούντων ἐν Δωδώνῃ γὰρ λέβητες παράλληλοι ἕκαστον ὃν εἴ τις ἐνὸς ἤψατο, πάντας συνέβαινεν ἡχεῖν.

Suid. Δωδωναῖον χαλκεῖον ἐπὶ τῶν μικρολογούντων. Δήμων γὰρ φησιν ὅτι τὸ τοῦ Διὸς μαντεῖον ἐν Δωδώνῃ λέβησιν ἐν κύκλῳ περιείληπται. τούτους δὲ ψαύειν ἀλλήλοις,⁴ καὶ κρουσθέντος τοῦ ἐνὸς ἡχεῖν ἐκ διαδοχῆς πάντας ὡς διὰ πολλοῦ χρόνου γίνεσθαι τῆς ἡχῆς τὴν περίοδον.

(Portus restored μακρολογούντων.)

Eustath. *Od.* ξ 327 τὸ παροιμιακὸν Δωδωναῖον Χαλκεῖον, περὶ οὗ Πανσανίας φησὶν, ὅτι ἐν Δωδώνῃ πολλὰν παραλλήλων κειμένων λεβήτων, εἴ τις ἐνὸς ᾄψεται, φασὶν ἐκ διαδοχῆς πάντας ἡχεῖν.

Serv. *scn.* 3. 466 in quo sunt vasa aerea quae uno tactu universa solebant sonare. (Perhaps we should read 'uno tactu')

¹ Prokop. *op.* 93, p. 269 Μαὶ ἡμεῖς καὶ Δωδωνῆς χαλκεῖον γεγόναμεν

² Cramer. *an.* 3. 225, 11 τὸ ἐν Δωδώνῃ χαλκεῖον ὑπερηχεῖς.

³ Athanasios *pp.* 1111: ὡς ὁ μὲν Δήμων φησὶν ἀπὸ τοῦ τὸν ναὺν τοῦ Δωδωναίου Διὸς τοίχους μὴ ἔχοντα, ἀλλὰ—ἐκάστω καὶ διαμένειν τὸν ἦχον ἄχρις αὖν τις τοῦ ἐνὸς ἐφάψεται. But this is doubly ungrammatical.

⁴ Muller *F.H.G.* iii. 125 reads ἀλλήλους with schol. Ven. *ap.* Bekk. Bernhardy keeps ἀλλήλοις with A.B.V.C. edd. vett. and schol. Ven. *ap.* Villosion. ἀλλήλων E. Muller also reads διὰ διαδοχῆς and γίνεσθαι. ψυχῆς for

ἡχῆς is found in A. schol. Ven. *ap.* Villosion.

⁵ ὅταν δὲ A. Leutsch would read ὃν ὅταν τις.

⁶ A MS. of the fourteenth century containing a compendium of Suidas amplified by important additions 'imprimis ad proverbia' (Bast). Schneidewin thought that the author, so far as his proverbs are concerned, was founding upon Aristophanes of Byzantium.

⁷ Presumably Pausanias the lexicographer, a contemporary of Galen, to whom Eustathios was much indebted (W. Christ *Gr. Lit.*³ p. 765).

The foregoing extracts describe the oracular shrine (*ναός, μαντεῖον*) of Zeus at Dodona as having no walls (*τοίχους μὴ ἔχοντα*) but in their stead a ring of tripods or caldrons (*τρίποδες, λέβητες*) placed so closely together that, if one were knocked, the vibration would go echoing on round the whole series. This description is referred to the Attic annalist Demon, who in addition to his *Ἀθίς* wrote some forty books *περὶ παροιμιῶν*. The facts relating to him are collected and sifted by Schneidewin in the *Puroemiographi Graeci* i. p. viii f. Schneidewin concludes that Demon flourished about 308 B.C. But the conclusion is precarious. All we can say with certainty is that Philochoros composed a treatise against Demon's *Ἀθίς*,¹ and that Philochoros was discharging religious duties at Athens in 306 B.C.² Demon's literary activity may have covered twenty or thirty years before the date at which Philochoros wrote. Schwartz in Pauly-Wissowa ii. 2181, 33 does not venture beyond the statement: 'Demon, vor Philochoros.'

The assertions of this fourth-century writer are by no means chimerical. It is not at all improbable that in primitive times the oracle at Dodona had no walls, and that the numerous votive tripods belonging to Zeus were arranged as a fence round the sacred enclosure.³ In the absence of a *χαλκοθήκη* nothing could be more natural. The acoustic phenomenon too is credible enough. If the caldrons were of equal dimensions, or if variation in size was balanced by variation in thickness, a note of the same pitch could be propagated from *A* to *B*, from *B* to *C*, etc.⁴ The accuracy, therefore, of Demon's information need not be called in question. It has however been doubted whether his account affords a satisfactory explanation of the proverb *τὸ Δωδωναῖον χαλκεῖον*. The Greeks themselves⁵ objected that the proverb spoke of a single gong whereas Demon described a series of caldrons or tripods, which could hardly have been termed a *χαλκεῖον*. Now at first sight this objection seems conclusive. But further reflection shows that it is not very cogent. If the series of tripods really served instead of a wall round the sacred spot, a space would be left for entrance, and it would be natural for the visitor to touch one or other of the two tripods to right and left of the entry. The particular tripod thus touched occasioned the whole sequence of echoes and might fairly be described as *τὸ Δωδωναῖον χαλκεῖον*. This arrangement admirably suits the wording of Menander and Kallimachos. The former says *λέγουσιν ἡχεῖν, ἂν παράφηθ' ὁ παριών*, with which cp. Demon's *ὥστε τὸν ἐνὸς ἀπτόμενον παραπέμπειν...τὴν ἐπήχησιν κ.τ.λ.* The latter uses the phrase *τὸν ἐν Δωδῶνι...χαλκὸν | ἡγείρον*, and elsewhere speaks of

¹ Suid. s.v. *Φιλόχορος* mentions his work *πρὸς τὴν Δήμωνος Ἀθίδα*, and Harpocrat. s.v. *Ἡσιωνία* cites *Φ. ἐν τῇ πρὸς Δήμωνα ἀντιγραφῇ*.

² Dion. Hal. *de Din.* 3: see Susenuhl *A. L. U.* i. 595.

³ Analogous examples are not wanting. According to Paus. x. 5. 9 the original temple of Apollo at Delphi was made of laurel-boughs, and the second temple of wax and feathers (see Frazer *ad loc.*). Reisch in Pauly-

Wissowa i. 1669, 37 suggests that the *Κερατῶν* of Delian inserr. was a large platform connected with the famous *κεράτινος βωμός*, which was made from the horns of goats sacrificed to Apollo. Paus. v. 10. 4 states that 'a gilt caldron is set on each extremity of the roof of the temple at Olympia.'

⁴ Cp. a well-known experiment with two or more tuning-forks.

⁵ See the passages cited in full below.

ἀσιγήτοιο λέβητος.¹ On the whole it may be granted that Demon's statement is reliable and provides us with at least a possible explanation of the proverb.

Nevertheless the objection considered above together with an alternative explanation was already forthcoming in ancient times—witness the following:

Suid. s.v. Δωδωναῖον χαλκείον. . . Ἀριστοτέλης δὲ ὡς πλάσμα διελέγχων δύο² φησὶ στύλους εἶναι, καὶ ἐπὶ μὲν τοῦ ἑτέρου λέβητα, ἐπὶ θατέρου δὲ παῖδα κρατοῦντα μάστιγα.³ ἥς τοὺς ἱμάντας χαλκίους ὄντας σειομένους⁴ ὑπ' ἀνέμου τῷ λέβητι προσκρούειν, τὸν δὲ τυπτόμενον ἡχεῖν.

κέχρηται δὲ τῇ παροιμίᾳ Μένανδρος Ἀδλητρίδι.⁵ < > πρὸς Δήμωνα.⁶ εἰ δὲ πολλοὶ ᾔσαν, οὐκ ἂν ἐνικῶς ἐλέγετο ἡ παροιμία.

(Bernhardy fills the lacuna thus: Φιλόχορος δὲ ἀντιλέγει πρὸς Δήμωνα· εἰ γὰρ πολλοί.)

Apostol. 6. 43 s.v. | Δωδωναῖον χαλκείον Ἀριστοτέλης δὲ ὡς πλάσμα διελέγχων δύο φησὶ στύλους εἶναι καὶ ἐπὶ μὲν τοῦ ἑτέρου λέβητα, ἐπὶ θατέρου δὲ παῖδα κρατοῦντα μάστιγα. ἥς τοὺς ἱμάντας χαλκίους ὄντας, σειομένους ὑπ' ἀνέμου τῷ λέβητι προσκρούειν, τὸν δὲ τυπτόμενον ἡχεῖν.

Steph. Byz. s.v. Δωδώνη, p. 165, 11 ff. Dind. (after stating Demon's view) ἡ παροιμία δὲ οὗ φησιν εἰ μὴ χαλκίον, ἐν ἄλλῳ λέβητι ἢ τριπόδα πολλοῦς.

(Carapanos reads χαλκίον ἐν, ἀλλ' οὐ λέβητας).

Call. Coislinianus 177 Ἀριστοτέλης δὲ δύο φησὶ στύλους εἶναι, καὶ ἐπὶ μὲν τοῦ ἐνὸς λέβητα, ἐπὶ δὲ θατέρου παῖδα κρατοῦντα μάστιγα, ἥς τοὺς ἱμάντας χαλκίους ὄντας σειομένους ὑπ' ἀνέμου, τῷ λέβητι προσκρούειν, τὸν δὲ τυπτόμενον ἡχεῖν.

Eustath. Od. ξ 327 Ἀριστοτέλης δὲ δύο στύλους εἶναι λέγει, καὶ ἐπὶ μὲν θατέρου λέβητα ἐστάναι, ἐπὶ δὲ θατέρου παῖδα κρατοῦντα μάστιγα, ἥς τοὺς ἱμάντας χαλκίους ὄντας καὶ σειομένους ὑπ' ἀνέμου τῷ λέβητι προσκρούειν, τὸν δὲ τυπτόμενον ἡχεῖν.

The objection to Demon's interpretation is introduced in Suidas' article by the words < > πρὸς Δήμωνα. When it is remembered that Philochoros wrote πρὸς τὴν Δήμωνος Ἀτθίδα (Suid.) and again ἐν τῇ πρὸς Δήμωνα ἀντιγραφῇ (Harpocr.), it becomes highly probable that, as Bernhardy conjectured, the name of Philochoros has dropped out and left a lacuna before πρὸς Δήμωνα. The restoration cannot, however, be regarded as quite beyond doubt, because the author of the rival interpretation too is said to have attacked Demon (ὡς πλάσμα διελέγχων).

That author, if we may trust our sources, was Aristotle. Most modern critics, on the strength of certain passages shortly to be discussed, assume that Ἀριστοτέλης is a blunder for Ἀριστείδης. Hence our paragraph is not included among the fragments of Aristotle in the Berlin edition. And yet it is far from certain that Aristotle did not write it. The philosopher's extant works appear to have been composed during his residence at Athens, 335–323 B.C. And Demon, as I have shown, flourished before 300 B.C., quite

¹ Call. h. Del. 286 γηλεές θεράποντες ἀσιγήτοιο λέβητος. This, however, may refer to the later and more elaborate λέβης: see below.

² Muller F.H.G. iv. 326 reads δύο.

³ μάστιγας C.

⁴ Muller F.H.G. iv. 326 reads ὄντας καὶ σειομένους.

⁵ Ἀδλητρίσι V.C.

⁶ Δήμωνα A.

possibly as early as 330 B.C.¹ There is then no chronological impossibility in the matter. Again, Aristotle is known to have given much attention to proverbs, as being the 'relics of primitive philosophy' (*frag.* 2, 1474b 6), and to have made a collection of them (*παροιμίας* a' Diog. Laert. 5, 26, *παροιμίας ἀθροῖσαι* Athen. 2, 60 E).² Further, his well-known ethical method included an examination of previous opinions (*ἔνδοξα*) as a preface to his own amended views. I incline, therefore, to believe that Aristotle did pen this account of the gong at Dodona as part of his *Παροιμίας*, intending to improve upon Demon's interpretation of the proverb. But whether the author of the argument *οὐκ ἂν ἐνικῶς κ.τ.λ.* was Aristotle or Philochoros can hardly be determined.

What then does Aristotle's statement amount to? There were at Dodona a couple of columns, supporting respectively a caldron (λέβητα) and a boy (παῖδα) grasping a whip whose bronze lashes, when swayed by the wind, struck the caldron and produced a reverberant sound.

Some further evidence is obtainable:—

Steph. Byz. s.v. Δωδώνη, p. 165 Dindl. προσθετόν οὖν τῷ περιγητῇ Πολέμωνι, ἀκριβῶς τὴν Δωδώνην ἐπισταμένῳ, καὶ Ἀριστείδῃ τὰ τούτου μεταγεγραφότι. λέγοντι κατὰ τὸν β'. ἐν τῇ Δωδώνῃ στύλοι β' παράλληλοι καὶ παρεγγύς ἀλλήλων, καὶ ἐπὶ μὲν θατέρου χαλκίον ἐστὶν οὐ μέγα, τοῖς δὲ νῦν παραπλήσιον λέβηται, ἐπὶ δὲ θατέρου παιδῶριον ἐν τῇ δεξιᾷ χειρὶ μαστίγιον ἔχον, οὐ κατὰ τὸ δεξιὸν μέρος ὁ τὸ λεβήτιον ἔχων κίων ἐστήκεν. ὅτ' ἂν οὖν ἄνεμος συμβῇ πνεῖν τοὺς τῆς μαστίγος ἰμάστας χαλκοῦς, ὅντας ὁμοίως τοῖς ἀληθινοῖς ἰμάσιν, αἰωρουμένους ὑπὸ τοῦ πνεύματος, συνέβαινε ψάειν τοῦ χαλκίου, καὶ τοῦτο ἀδιαλείπτως ποιεῖν, ἕως ἂν ὁ ἄνεμος διαμῆνῃ.

Zenob. 6, 5 τὸ Δωδωναῖον χαλκίον κείται παρὰ Μενάνδρῳ ἐν τῇ Ἀρρήφωρῳ εἰρηται δὲ ἐπὶ τῶν πολλὰ λαλούντων καὶ μὴ διαλείποντων. φασὶ γὰρ ἐν Δωδώνῃ χαλκίον ἐπὶ κίονος ἐν μετεώρῳ κεῖσθαι. ἐπὶ δὲ ἐτέρου πλησίον κίονος ἐστάναι τὸν παῖδα ἐξηρητημένον μαστίγια χαλκῆν πνεύματος δὲ κινήθεντος μεγάλου τὴν μαστίγια πολλὰκίς εἰς τὸν λέβητα ἐκκπτειν, καὶ ἤχῃν οὕτω τὸν λέβητα ἐπὶ χρόνον πολὺν.

Codd. B. V.⁷

Cramer *annot.* Paris. 4, 259

ἐν Δωδώνῃ γὰρ ἐπὶ κίονος χαλκίον ἵστατο. ἐπὶ δ' αὐτοῦ πλησίον παῖς ἐξηρητημένος μαστίγια χαλκῆν πνεύματος κινούντος εἰς τὸν λέβητα ταύτην ἐνέβαλλε (ἐνέβαλεν V), καὶ οὕτως (οὕτως Δ.) ἤχος ἀπετελεῖτο μέγας.

ἐν Δωδώνῃ χαλκοῦς λέβης ἔκειτο ἐφ' ὑψηλοῦ κίονος, ἐφ' ἐτέρου κίονος πλησίον ἵστατο νεανίας τις ὁμοίος χαλκῆν μαστίγια φέρων. πνεύματος δὲ σφοδρῶς ἐπιόντος φασὶν ἐμπίπτειν τὴν χαλκῆν μαστίγια ἐν τῷ λευκῷ σάκει καὶ πολὺν τὸν ἤχον ἐξακούεσθαι. ὅθεν παροιμία ἐπὶ τῶν πολυλάγων τὸ πλέον τοῦ ἐν Δωδώνῃ χαλκίου λέγει.

¹ He was one of the earliest writers of *Ἀθροῖδες*. The order, as given by Schwartz *loc. cit.*, is Kleidemos or Kleitodemos, Androtion, Demon, Philochoros, etc. And W. Christ *Gr. Lit.*³ pp. 480, 553, argues that the older *Ἀθροῖδες* were one of the main sources of Aristotle's *Ἀθ. Πολ.* If so, Aristotle may well have had Demon's works before him.

² See further Schneidewin in *Par. Gr.* i. p. iif. He concludes: 'nostrorum Paroemiographorum auctores quin usurpaverint librum

Aristotelis non dubito.'

³ Read τὴν β'.

⁴ Read ὅταν οὖν.

⁵ Delete commas after χαλκοῦς and ἰμάσιν.

⁶ Vulg. τῷ Ἀρρηφώρῳ. Meineke restored τῇ Ἀρρηφώρῳ.

⁷ Cod. B is a Bodleian MS., Cod. V a Vatican MS. See Schneidewin *Par. Gr.* i. p. xxx f.

⁸ Cod. A is the Paris MS. of Arsenius (*Par.* 3058). See Leutsch *Par. Gr.* ii. p. xiii ff.

Steph. Byz. s.v. Δω-
δώνη, p. 165 Dind.

καὶ κατὰ μέν¹ τοι τοὺς
ἡμετέρους φησὶν ὁ Ταρ-
ραῖος. εἰ μὲν λάβῃ τῆς
μάστιγος, οἶδε ἱμάντες
* * * πεπτώκασιν.
παρὰ¹² μέντοι τῶν ἐπι-
χωρίων³ ἠκούσαμεν, ὥς
ἐπείπερ ἐτύπτετο μὲν
ὕπὸ μάστιγος, ἤχει⁴ δ'
ἐπὶ πολλὸν χρόνον, ὥς
χειμερίου τῆς Δωδώνης
ὑπαρχούσης, εἰκότως εἰς
παροιμίαν παρεγένετο.⁵
μένονται αὐτῆς Μέναν-
δρος ἐν Ἀρρήφωρφ. ἔαν
δὲ κινήσῃ μόνος τὴν
Μυρτίλην ταύτην τις,
ἦν⁶ τίτην καλεῖ πέρας⁷
ποιεῖ λαλιῶς τὸ Δωδα-
ναῖον ἂν τι⁸ χαλκίον, δ
λέγουσιν ἤχειν, ἂν
παρήψαθ'⁹ δ παριών,
τὴν ἡμέραν ὕλην κατα-
παύται¹⁰ θάπτυν, ἢ ταύ-
την λαλοῦσαν, νύκτα
γὰρ προσλαμβάνει.

Zenob. 6, 5

Codd. B. V.

Crameranecd. Pariss.
1, 259.

I have placed the extracts from Zenobius, etc. in parallel columns with that from Stephanus of Byzantium because, though they do not expressly refer their contents to Aristides, it is probable that they are derived from him. Stephanus seems to have obtained his information about the proverb from the famous paroemiographer Lukillos, of Tarra in Crete.¹¹ Zenobius the sophist is known to have epitomised the proverbs of Didymus and Lukillos: ¹² his epitome was not, however, minutely accurate, for he often neglected to name his authorities.¹³ Zenobius' compilation in its turn became the basis or groundwork of various others. Of these later collections the one that bears most resemblance to the work of Zenobius himself is that which is still known by his name. Another collection of importance, which draws largely from

¹ Read καὶ 'κατὰ μέντοι τοὺς ἡμετέρους, φησὶν ὁ Ταρραῖος, ἢ μὲν λαβὴ τῆς μάστιγος >, οἱ δὲ ἱμάντες <ἀπὸ> πεπτώκασιν. κ.τ.λ.' Pieller *Poëmon* p. 61 ej. ἔως ἂν ὁ ἄνεμος διαμένῃ καὶ λάβῃ τῆς μάστιγος, ἀσπιβ-
ing these words to Aristides. Schneidewin *Par. Gr.* i. p. xiv. rightly criticises this and suggests κατὰ μέντοι τοὺς ἡμετέρους, φ. ὁ T, ἔστι μὲν λαβὴ τῆς μάστιγος, οἱ δὲ ἱμάντες ἀπο-
πεπτώκασιν. κ.τ.λ. Carapanos prints 'καὶ κατὰ μέντοι τοὺς ἡμετέρους (χρόνους), φ. ὁ T, ἢ μὲν λαβὴ τῆς μάστιγος (διασέσωσται), οἱ δὲ ἱμάντες ἀποπεπτώκασιν.'

² MSS. περὶ, for which Preller restored παρὰ.

³ Read ἐπιχωρίων τινὸς with MSS. and Schneidewin.

⁴ Read ἤχει with Schneidewin.

⁵ Read περιεγένετο with Schneidewin. who adds τὸ χαλκίον unnecessarily.

⁶ Bentley restored ἦ for ἦν and καλῇ for καλεῖ. Carapanos prints ἢ τίτην καλεῖ.

⁷ Bentley inserted πέρας <οὐ> ποιεῖ.

⁸ Meineke, τις for τι.

⁹ Meineke, παρήψαθ' for παρήψαθ'.

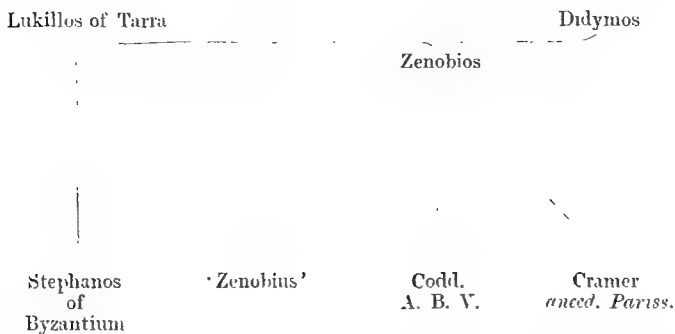
¹⁰ Meineke, καταπαύσαι for καταπαύσαι.

¹¹ *Par. Gr.* i. p. xiii.

¹² Suid. s.v. Ζηρόβιος says ἔγραψεν ἐπιτομὴν τῶν παροιμιῶν Διδύμου καὶ Ταρραίου κ.τ.λ. Cp. Schol. At. nuβ. 134 Ζηρόδοτος (Herm. corr. Ζηρόβιος) ὁ τὰς Ταρραίου καὶ Διδύμου παροιμίας ἐπιτεμὼν. See further *Par. Gr.* i. p. xxiv. f.

¹³ *Par. Gr.* i. p. xxv f.

the same source, is that represented by codd. A.B.V.¹ Cramer *anecd. Pariss* 4, 259 seems to be a third. If so, we obtain the following stemma:—



Lukillos of Tarra, the sponsor for the information contained in this group of extracts, is identified by Usener² with Lukillos (or Lucilius) who wrote two books of epigrams in the reign of Nero.³ At that date, as he himself observes, the handle of the whip held by the statue still survived, though its lashes had fallen off. A native of Dodona told him that formerly the gong, when struck by the whip, resounded for long: Dodona was a stormy place and the wind swayed the lashes; this constant vibration occasioned the proverb. For the rest, Lukillos relies on Aristeides, who copied the account given by Polemon. This Aristeides was presumably the author of three books *περὶ παροιμιῶν* quoted by Athen. 14. 641 A. It is commonly assumed⁴ that he is further to be identified with the author of the *Μιλησιακά* (2nd cent. B.C.): but this assumption is unfounded.⁵ Nor can we equate him with P. Aelius Aristides the rhetorician: for, though Aelius Aristides is known to have mentioned the gong at Dodona,⁶ his date (129–189 A.D.) precludes the possibility of his having been followed by Lukillos. We must be content to date the Aristeides of our passage before Lukillos and after Polemon. Polemon the *περιηγητής*, who is cited as the ultimate source of the description, was in all probability an eye-witness of what he describes: for he is known to have travelled throughout Greece and to have indited such treatises as *περὶ τῶν ἐν Σικυνῶν πινάκων*,⁷ *περὶ τῶν ἐν Δελφοῖς θησαυρῶν*,⁸ *περὶ τῶν ἐν Λακεδαίμονι ἀναθημάτων*,⁹ *περὶ τῶν ἀναθημάτων τῶν ἐν ἀκροπόλει*,¹⁰ κ.τ.λ. He was *provenos* of Delphi in 177/6 B.C.¹¹

The description thus carried back to a satisfactory source in the second century B.C. tallies in the main with that of Aristotle, but adds little or nothing to his account. It conveys the impression that the whole *objet d'art* was of no great size (*χαλκίον...οὐ μέγα, παιδάριον, μαστίγιον*).

¹ *Par. Gr.* i. p. xxx f.

² *Sitzb. d. bay. Ak.* 1892, p. 644.

³ *Anth. Pal.* ix. 572.

⁴ *E.g.* by Müller *F.H.G.* iv. 326.

⁵ W. Schmid in *Pauly-Wissowa* ii. 886, 42.

⁶ See the quotation given above, p. 5.

⁷ Athen. 13. 567 B. ep. Diog. Laert. vii. 188.

⁸ Plut. *quaest. symp.* v. 2, 675 E.

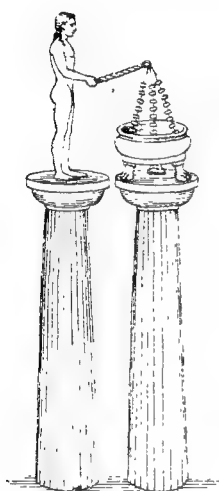
⁹ Suid. s.v. *Πολέμων*, ep. Athen. 13. 574 c.

¹⁰ Strab. ix. 1. 16.

¹¹ Wescher-Foucart *inser. de Delphes* n. 18, 260.

A few other details are to be had from Strabo vii. *frag.* 3: ὅτι ἡ παροιμία, Τὸ ἐν Δωδώνῃ χαλκεῖον, ἐντεῦθεν ὠνομάσθη· χαλκεῖον ἦν ἐν τῷ ἱερῷ, ἔχον ὑπερκείμενον ἀνδριάντα, κρατοῦντα μάστιγα χαλκῆν, ἀνάθημα Κορκυραίων· ἡ δὲ μάστιξ ἦν τριπλῇ, ἀλυσιδωτῇ, ἀπηρτημένους ἔχουσα ἐξ αὐτῆς ἀστραγάλους, οἱ πλήττοντες τὸ χαλκεῖον συνεχῶς, ὅποτε αἰωροῖντο ὑπὸ τῶν ἀνέμων, μακροὺς ἤχους ἀπειργάζοντο, ἕως ὃ μετρῶν τὸν χρόνον ἀπὸ τῆς ἀρχῆς τοῦ ἤχου μέχρι τέλους καὶ ἐπὶ τετρακόσια προέλθοι¹. ὅθεν καὶ ἡ παροιμία ἐλέχθη, Ἡ Κερκυραίων μάστιξ.

It will be noticed that Strabo uses the imperfect tense: 'there used to be (ἦν) a gong' etc. He was writing the fourth book of his Geography in the year 18 A.D.,² and the seventeenth a few years later.³ It might therefore be thought that his account is inconsistent with that of Lukillos, who describes the gong as still existing, though damaged, circ. 54-68 A.D. But the word ἦν may well be merely the conscientious preterite of an author who is relying upon a previous narrator. That previous narrator was probably Apollodoros,⁴ the celebrated grammarian of Athens; so that the details given by Strabo likewise date back to the second century B.C. They are moreover, on the face of them, trustworthy. That the whip was dedicated by the Corcyreans,⁵ that it consisted of three chains tipped with buttons, and that you could count four hundred before the reverberation died away, are small points not likely to have been invented.



RESTORATION OF THE
GONG AT DODONA.

This circumstantial account, supplemented by the descriptions already recorded, enables us to form a fairly clear idea of the whole contrivance. In the accompanying restoration the bronze *lebes* and stand are copied from specimens actually found at Dodona;⁶ the attitude of the boy is based on that of the Piombino Apollo; the whip-handle represents an original found at

¹ MS. *προσελθεῖν*, Kramer *προέλθοι*.

² Strab. iv. 6. 9.

³ Strab. xvii. 3. 7. See W. Christ *Gr. Lit.*,¹ p. 684 n. 3.

⁴ This Apollodoros was Strabo's main source for the geography of Greece (W. Christ *ib.* p. 984). Schwartz in *Pauly-Wissowa* i. 2867 ff. enumerates the passages in which Strabo is indebted to him: they include several from bk. 7, but not frag. 3. Nevertheless it is probable that frag. 3 had the same origin. For where Strabo is dealing with places mentioned in the Homeric *Catalogue* he constantly cites Apollodoros' great work *Περὶ νεῶν καταλόγου* (see Niese in *Rh. Mus.* xxxii p. 267 ff.); and Strabo in frag. 3 is describing Dodona, which

the *Catalogue* mentions as Δωδώνην δυσχείμερον (*II* 2. 750).

⁵ Strabo's wording is a little ambiguous. I assume that ἀνάθημα Κορκυραίων is in apposition to μάστιγα χαλκῆν (rather than τὸ ἀνδριάντα or τὸ χαλκεῖον), partly because μάστιγα is the nearest substantive, partly because the proverb was ἡ Κερκυραίων μάστιξ.

⁶ Carapanos *Dodone et ses ruines* Plate xxiii., nos. 1-2. The λέβης is inscribed in punctured letters ΦΙΛΟΚΛΕΔΑΘΔΑΜΟΦΙΛΟΥ ΛΕΥΚΑΔΙΟΣΔΙΝΑΙΟΙ. The stand is inscribed ΤΕΡΨΙΚΛΗΣ:ΤΩΙΔΙ:ΝΑΙΩΙ:ΡΑΥΩΙΔΟΣ:ΑΝΕΘΗΚΕ.

Herculaneum,¹ and the lashes, from the *stèle* of an *archigallus*,² exactly correspond to Strabo's words. Carapanos' conjecture,³ that the gong and the statue stood on the two columns that formed the *propylaea*⁴ of the *temenos*, is not indeed inconsistent with Strabo's expression ἐν τῷ ἱερῷ and might even claim the support of the Syrian parallel to be mentioned later on; but it is architecturally improbable.

One question remains. Which was the real Δωδωναῖον χαλκείον—the gong thus restored or the series of tripods described by Demon? The gong thus restored we have traced back certainly to the close of the second century B.C. in Aristeides' version of Polemon's account (not to mention Strabo's extract from Apollodoros), probably to the latter part of the fourth century B.C. in Aristotle's description. And most of the literary evidence available tends to support its claim. Nevertheless, our earliest authority, the fragment of Menander's *Arrephoros*, is strongly opposed to such an identification—'the gong at Dodona, which they say sounds all day if a passer-by lays a finger on it' (ἀν παράψῃθ' ὁ παριών). A gong mounted on a pillar could hardly be brushed by ὁ παριών. Again, the fragment of Kallimachos cited above—τὸν ἐν Δωδῶνι...χαλκὸν | ἤγειρον—seems more applicable to one of Demon's tripods standing on the ground than to Polemon's caldron mounted on a column. Finally, Clement of Alexandria expressly distinguishes the Δωδωναῖον χαλκείον from the λέβητα Θεσπρωτείου, as does his follower⁵ Theodoret of Cyprus:

Clem. Al. *protr.* 11 Dind. ἅδυντα τοίνυν ἔθεα μὴ πολυπραγμονεῖτε μηδὲ βαράθρων στόματα τερατείας ἐμπλεα, ἢ λέβητα Θεσπρωτείου ἢ τρίποδα Κιρραίων ἢ Δωδωναῖον χαλκείον· γεράνδρυν δὲ ψάμμοις ἐρήμῃσι τετιμημένον καὶ τὸ αὐτόθι μαντεῖον αὐτῇ δρῦι μεμαρασμένον μύθοις γεγηρακόσι καταλείψατε.

(Read Θεσπρωτίον for MSS. Θεσπρωταῖον and keep MSS. χαλκείον. The last sentence is apparently, as Theodoret saw, a confusion between the oak of Dodona and the desert oracle of Ammon. J. B. Mayor c.j. τετηρημένον for τετιμημένον: but the phrase may be taken from an iambic tag, γεράνδρυν | ψάμμοις ἐρήμῃσι ἐντετιμῆται or the like.)

Theodoret. *de Graec. affect.* x (vol. iv p. 623) καὶ τὴν ἱερὰν δρῦν καὶ τὸ Δωδωναῖον χαλκείον καὶ τὸν Κιρραῖον τρίποδα καὶ τὸν Θεσπρωτίον λέβητα· καὶ ἐν Λιβύῃ μὲν τὸ μαντεῖον Ἀμμωνος ἐν δὲ γε Δωδῶνι τὸ τοῦ Διός.

All these allusions may be harmonised if we assume—and the assumption involves no improbability—that the original Δωδωναῖον χαλκείον was the row of resonant tripods round the sacred enclosure, and that at a later date (? 4th century B.C.), when buildings were erected, these were replaced by a more elaborate and artistic gong mounted on two pillars as described above. The whip of the new gong, either presented at first by the Corcyreans or subsequently renewed by them, gave rise to the second proverb mentioned by Strabo, ἡ Κερκυραίων μάστιξ.

¹ Rich *s.c.* 'flagrum,' Dar.-Sagl. ii. 1155, Fig. 3092.

² Winckelmann *Monum. inedit.* i. 8 p. 8.

³ *Dodone et ses ruines* p. 168 f.

⁴ *ib.* Plate iii., no. 8.

⁵ As Potter on Clem. Al. *loc. cit.* observes, 'solet...Theodoretus Clementem compilare.'

(2) THE FUNCTION OF THE GONG AT DODONA.

Thus far we have dealt with the outward aspect of the gong: we have still to discuss its purpose and significance. A triple division of the topic will conduce to clearness. Why was the sound of bronze desirable? Why was it produced by means of a whip? Why was the gong mounted on a couple of columns?

An early scholiast¹ on Theocritus ii. 36 quotes Apollodoros *περὶ θεῶν* to the effect that bronze was employed in all kinds of purificatory ritual (*πρὸς πᾶσαν ἀφοσίωσιν καὶ ἀποκάθαρσιν*) because it was regarded as pure and an averter of pollution (*καθαρὸς...καὶ ἀπελαστικὸς τῶν μiasμάτων*). The context shows that by bronze is meant the beating of bronze (*ὁ τοῦ χαλκοῦ ἦχος*), and specifies two occasions when this was customary, viz. during eclipses of the moon and at funerals. That bronze was beaten by the ancients at lunar eclipses appears from various passages in the Latin authors.² The early Fathers protested against the practice, which lasted on into Christian times,³ and is still common in the East.⁴ Similarly at the rising of Seirios the inhabitants of Ceos used to clash weapons⁵ by way of averting malefic influences⁶: any obscuration of the star they regarded as portending a year of sickness.⁷

The beating of bronze at funerals is less familiar. But our scholiast again cites Apollodoros for the statement that the sound of bronze was appropriate to the departed (*οἰκεῖος τοῖς κατοικομένοις*) and, on the same authority, gives a couple of examples. The first of these refers to the

¹ Ahrens *Buc. Gr.* ii. 103. 9 ff. τὸ χαλκὸν ὡς τὰ χυρὸν ἔχει: τὸν γὰρ (δὲ Gen^b.) χαλκὸν ἐπῆγον (so Reinesius, ἐπῆδον 4. 5. Can. Gen^b. Vulc., ἐπεῖδον vulg.). ἐπλησσον Moriz Schmidt, ἐπαιον Cornes, ἤπειγον Kiessling, ἐπῆδον = 'locerunt accumere' Heyne, ἐπήχουν Heusterhuis, ἐπῆρον Aliensis, ἐν ταῖς ἐκλείψει (so 4. 5. Gen^b., ἐλλείψει vulg.) τῆς σελήνης καὶ ἐν (ἐπὶ Jahn) τοῖς κατοικομένοις (κατηχομένοις 4. 5.), ἐπειδὴ ἐνομίζετο καθαρὸς εἶναι καὶ ἀπελαστικὸς (ἀποπελαστικὸς 5.) τῶν μiasμάτων. διόπερ πρὸς πᾶσαν ἀφοσίωσιν καὶ ἀποκάθαρσιν αὐτῷ (αὐτὸ Gen^b.) ἐχρῶντο, ὥς φησι (ὥς φησι om. 4 Gen^b.) καὶ Ἀπολλόδωρος ἐν τῷ περὶ θεῶν (Apollod. *fr.* 36).—τὸ ἔχει ὡς τὰ χυρὸν ἔχει Gen^b.) ἀντὶ τοῦ ψόφει, κρούει (κρούων 5.). ἐπεὶ ὁ τοῦ χαλκοῦ ἦχος οἰκεῖος (οἰκεῖον Gen^b.) τοῖς κατοικομένοις (κατηχομένοις 5.), φησὶν Ἀπολλόδωρος Ἀθήνησι τὸν ἱεροφάντην τῆς Κόρης ἐπικαλουμένης ἐπικρούειν (ἐπικρούσειν Gen^b., κρούειν Dübner) τὸ καλούμενον ἦχεϊον (οἰκεῖον 5. Gen^b.) καὶ παρὰ (περὶ 5. Can. Vulc.) Λάκωσι (Λάκωνος 5. Can. Gen^b.) βασιλέως ἀποθανόντος εἰῶθαι κρούειν λέβητα.

² Tib. i. 8. 21 f., Ov. *met.* iv. 333, Liv. xxvi. 5, 9, Tac. *ann.* i. 28. 1-3, Stat. *Theb.* vi. 686 f., Sen. *Med.* 797, Juv. vi. 442 f., Mart. xii. 57, 16 f., Plin. *N.H.* ii. 12. So Plut. *Aem. Paul.* 17.

³ See Harduin on Plin. *N.H.* ii. 12.

⁴ Rupert on Juv. vi. 442 f.

⁵ Schol. Ap. Rhod. ii. 526 μεθ' ὧπων ἐπιτηρεῖν τὴν ἐπιτολὴν τοῦ κυνός.

⁶ See Preller-Robert i. 453. n. 2. Schirmer in Roscher i. 549, 33 ff., Pridik *de Cei insularibus* p. 136 f., Gruppe *Gr. Myth.* p. 234.

⁷ Herakleides Ponticus *ap. Cic. de divin.* i. 130 'etenim Ceos accepimus ortum caniculae diligenter quotannis solere servare, comecturamque capere, ut scribit Ponticus Heraclides, salubrisne an pestilens annus futurus sit. nam si obscurior et quasi caliginosa stella exstiterit, pingue et concretum esse caelum, ut eius aspiratio gravis et pestilens futura sit: sin illustis et perlucida stella apparuerit, significari caelum esse tunc purumque et propterea salubre.'

Eleusinian Mysteries. At Athens, he says, the hierophant beats a gong (ἐπικρούειν τὸ καλούμενον ἡχείον) at Kore's invocation.¹ The allusion is seemingly to a scene in the sacred drama; and O. Gruppe² is probably right in supposing that the gong was sounded to ward off chthonian powers. Phantoms of the sort are called ἄγρια φαντάσματα in Stob. flor. 120, iv p. 107 Mein.³; and Tzetzes on Lycophron 77 (i. 368 M.) says ὁ γὰρ κύων βαῦξας λύει τὰ φάσματα, ὡς καὶ χαλκὸς κροτηθεὶς, εἴτε τι τοιοῦτον. Lucian too, when contrasting the conduct of a certain woman with that of ghosts, remarks (Philopseudes 15) τὸ ἐναντίον τοῖς φάσμασι πέπονθεν· ἐκείνα μὲν γὰρ ἦν ψόφον ἀκούση χαλκοῦ ἢ σιδήρου πέφενγε—καὶ ταῦτα γὰρ ὑμεῖς φατε—αὕτη δέ, ἦν ἀργυρίον που ψοφῇ, ἔρχεται πρὸς τὸν ἡχον. The phrase χαλκὸς κροτηθεὶς⁴ recalls Pindar's epithet for Demeter, χαλκοκρότου... Δαμάτερος (Isth. vii. 3 f.). There is no doubt that the clashing of bronze in various forms was characteristic of her cult. A formula used by the mystics was ἐκ τυμπάνου ἔφαγον, ἐκ κυμβάλου ἔπιον, κ.τ.λ.⁵ The Ravenna scholiast on Aristoph. Ach. 709 says: 'They called Demeter Ἀχαία (the noisy) from the noise of the cymbals and drums which was made in searching for Kore.'⁶ Another scholion adds ἡ ἀπὸ τοῦ ἡχου ὃν παρῆχε τοῖς περὶ τὴν γέφυραν εἰς Ἀθήνας ἀπιοῦσιν. Lenormant⁷ shows that between the sacred fig-tree and the bridge on the sacred way was a place called Echo, where the ministers of Eleusis made this din with ἡχεία while the procession of mystae was returning to Athens. Velleius i. 4. 1 states that, according to one account, the fleet from Chalkis which colonised Cumae was guided 'nocturno aeris sono, qualis Cerealius sacris cieri solet.'⁸ Orion *etym.* p. 18, 24 accounts for the epithet Ἀχαία by quoting the following tale from a scholion on Aristophanes now lost: τοῖς Ταναγραίοις μεταστᾶσιν ἐκ τῆς Τανάγρας ἐκέλευσε κατ' ὄναρ ἡ Δημήτηρ φανείσα αὐτοῖς ἀκολουθήσαι τῷ γενομένῳ ἡχῳ καὶ ὅπου ἂν παύσῃται ἐκεῖ πόλιν κτίσαι. καὶ διώδευον ἀκούοντες ψόφον κυμβάλων καὶ τυμπάνων. καὶ παυσασμένων περὶ τὴν Ἀττικὴν ἔκτισαν πόλιν καὶ ἰδρύσαντο ἱερὸν Ἀχαιᾶς Δήμητρος. Finally, a terra-cotta lamp published in the *Bulletino Archeologico Napoletano* iii. 182, Pl. vii shows a pair of cymbals slung from the 'pomegranates of Proserpine' and next to them the 'ear of corn of Ceres' (Elworthy *The Evil Eye* p. 384, Fig. 184).

The second example of the funereal beating of bronze given by the scholiast on Theocritus is the Spartan practice of beating a caldron (κρούειν λέβητα) on the death of a king. Saglio in Dar.-Sagl. i. 1561 remarks that

¹ Roehl *inserr. Gr. ant.*² p. 24, ix. 1 figures a votive cymbal with Thessalian inser. ΚΑΜΟΝΝΕΘΝΣΕΤΑΙΚΟΡΦΑΙ on which see Hoffmann *Dial.* ii. 52, no. 81, Roberts *Ep.* i. 244, n. 237a, and especially Studniczka in *Ath. Mitth.* 1896 xxi. 240 who reads Καμὸν νέθυσε τῇ Κόρφῃ = Καμὸν ἀνέθυσε κ.τ.λ.

² Gruppe *Gr. Myth.* p. 54, n. 9.

³ See Lenormant in Dar.-Sagl. ii. 576.

⁴ Cp. Rohde *Psyche* 248, 2, and Hoeck 3. 302 ff.

⁵ Lenormant *ibid.* p. 571 f.

⁶ So *et. mag.* 180, 36 ἔτι μετὰ κυμβάλων ἡχοῦσα τὴν Κόρην ἐξήτει.

⁷ Lenormant *ibid.* p. 563. Cp. Pieller-Robert ii. 792, n. 1.

⁸ Ov. *A. A.* ii. 609 f. 'condita si non sunt Veneris mysteria cistis, nec cava vaesantis ictibus aera sonant' is referred by Ruhnken to the rites of Demeter rather than to those of Cybele (Heinsius, Burmann).

'tintinnabula' are sometimes found in tombs and suggests that the same superstitious reason may account for a very singular gong or rattle found in a grave at Vulci (Fig. 2064).¹ Pottier *ib.* 1697 notes that cymbals in the hands of Sirens have a funerary meaning and quotes examples.² In medieval and modern times the gong has been replaced by a bell.³ On the one hand evil spirits are exorcised by 'bell and book': on the other, the 'passing bell'⁴ is still tolled for the dead.

The same prophylactic or apotropaic virtue explains the beating of bronze in other cults besides that of Demeter. When Simaitha at her magic rites hears the dogs barking, she exclaims *ἡ θεὸς ἐν τριόδοισι· τὸ χαλκίον ὡς τάχος ἄχει* (Theocr. ii. 36), i.e. 'the chthonian Artemis⁵ is approaching, make the spot holy ground by banging the bronze.' On the bronze votive-hands collected and discussed by Jahn⁶ among other prophylactic emblems appear 'a *tympanon*, a bell, *krotula*, cymbals,' etc.⁷ Of those in the British Museum⁸ one has a 'tambourine'⁹ and another a 'pair of cymbals.'¹⁰ Magic, as usual, imitates the rites and adopts the paraphernalia of established religion. The Asiatic Kybele was honoured by women *τυπάνοισι καὶ ῥόμβοισι καὶ χαλκοκτύπων | βόμβοις βρέμοντας ἀντίχερσι κυμβύλων* (Diogenes trag. *Semele* ap. Athen. xiv. 636 A).¹¹ She too, like Demeter, was called *χαλκοκρότος* (Orph. hymn. 41). And in the closely associated worship of Attis the initiates' formula *ἐκ τυμπάνου βέβρωκα, ἐκ κυμβάλου πέπωκα, γέγονα μύστης Ἀττεως*¹² was almost identical with that used in the Eleusinian rite. A bas-relief in the Louvre¹³ represents the sacrifice of a ram to Attis: from an old oak are suspended two cymbals or bells.¹⁴ Similarly on a coin of the elder Faustina,¹⁵ which shows Kybele enthroned with Attis at her side, a

¹ Riess in Pauly-Wissowa i. 1986, 11 s.v. *Annuliti* describes a fibula with a number of small metal knobs found in a tomb and explains them as a prophylactic rattle: see *Annali d. Inst.* 1882 Pl. Q. 7.

² Bruzza in *Annali dell' Inst.* 1875 p. 60 (cp. p. 67 f.) cites for the use of bronze in funeral rites Passeri *Mem. della Soc. Colomb.* vol. i. Lorenzi *de praecon. cyth. fistul. ac tintinnab.* Gronov. viii p. 1469, Magio *de tintinnab.* Sallengre ii. p. 1187, Lazzarini *de vario tint. usu* Romae 1822.

³ See Paul Santori 'Glockensagen u. Glockenaberglaube' in *Zeitschrift des Vereins für Volkskunde* vii (1897), 113 ff., 270 ff., 358 ff., viii (1898), 29 ff.

⁴ On it see Thielton Dyer *The Ghost World*, p. 15.

⁵ Roehl *inscr. Gr. ant.* p. 26, x. 8 figures a votive cymbal with Laconian inscr. ΒΟΠΟΡΙΖΑΙΕΘΕΚΕΛΙΜΜΑΤΙ = 'Ὁραὶς ἀνέθηκε Διμνάτι, on which see Roberts *Ep.* 1, p. 251 f., no. 252 Other cymbals inscribed to Artemis Limnatis are *I.G.A.* 50

ζΙΤΑΜΩ|Α = Διμνάτις and *I.G.A.* 73 Π[ολυα]νθίς (?) ἀνέθηκε τῇ Διμνάτι.

⁶ O. Jahn in *Berichte d. k. Sachs. Ges. d. Wissenschaften* Philol.-Hist. 1855, p. 101 ff.

⁷ F. T. Elworthy *The Evil Eye*, p. 327, enumerates 'the tympanum on one [hand], bells on one, crotala on two, cymbals on three.'

⁸ Brit. Mus. *Cat. Bronzes*, 874-876.

⁹ *ib.* no. 875, Fig. 22.

¹⁰ *ib.* no. 876.

¹¹ On the cymbals, tympana, and krotala used in the worship of Cybele see Rapp in Roscher *Lex.* ii. 1658, 44 ff., Decharme in *Dar.-Sagl.* i. 1682, n. 132, Pottier *ib.* 1697.

¹² Firmic. Matern. *de error. profun. relig.* 18 Halm.

¹³ Frohner *Cat.* 545, Reinach *Rep. Stat.* i. 101. Cp. the relief from a Kybele-and-Attis altar in Baumeister *Denkm.* p. 801, Fig. 866, which shows two bells slung from a pine.

¹⁴ Botticher *Baumkultus*, p. 538, Fig. 13.

¹⁵ Roscher *Lex.* ii. 1647, Fig. 2.

couple of bells is attached to a stump in the background. The dance of the Kuretes and Korybantes with clashing shields served as an *ἀποτρόπαιον*, averting evil from the infant Zeus.¹ The *armorum horror* is met with in other myths. When Herakles was at a loss how to drive the Stymphalian birds from their covert, Athena gave him bronze clappers (χάλκεα κρόταλα) which she had obtained from Hephaistos: with these he scared them and, as soon as they rose, he shot them down.² In imitation of this exploit the Argonauts on reaching the island Aetias, at the advice of Phineus, scared the fierce birds that inhabited it by the clash of shields and spears.³ The Korybantes also used various other instruments of percussion for the same purpose,⁴ e.g. κορυβαντείων ἰαχήματα χάλκεα ῥόπτρων (Anth. Pal. vi. 165, 3 Phalaikos). Similar jingles were perhaps in vogue in the Kabeiric mysteries: the British Museum possesses a small bronze bell⁵ from the temple of the Kabeiroi at Thebes, inscribed in punctured letters ΠΥΡΙΑΣ ΚΑΒΙΡΩΙ ΚΑΙ ΠΑΙΔΙ=Πυρ(ρ)ίας Καβίρω καὶ Παιδί. The attendants of Dionysus constantly carry tympana, which are sometimes edged with a row of small bells,⁶ or else cymbals.⁷ P. Gusman *Pompéi* p. 146, after figuring many of the little bells found at Pompeii, observes: 'Les clochettes étaient usitées aussi comme moyen de protection et souvent attachées à des phalli.' O. Jahn in *Berichte d. k. Sachs. Ges. d. Wissenschaften*, Philol.-Hist., 1855 p. 79, says: 'Nicht selten sind an den phallischen Amuletten Schnellen angebracht . . . besonders gegen gespenstische Einflüsse hielt man diesen Klang wirksam.' He cites Ant. di Erc. vii. 95-99, and adds 'An den Phallen in und bei Nîmes sind sie auch im Relief angedeutet.' A remarkable example is given in Reinach *Rép. Stat.* ii. 75. 4. In the middle ages bells were often embroidered on bed-curtains and other hangings, as also on ecclesiastical vestments. A writer in *Folk-lore* ix. (1898), p. 79, compares this practice with that of negroes in Florida who 'embroider the corners of their pillow-shams and bed-spreads with hand-bells.' In Seyros at carnival time a highly interesting beast-dance with bells is still kept up: *vide* the description given in the *Annual of the British School at Athens* vi. 125. Mr. F. T. Elworthy (*The Evil Eye*, pp. 356-358, Figs. 166-169) depicts a whole series of silver amulets worn by the modern Neapolitans as a protection *contra la jettatura*. They are of several different types, but from all alike is suspended a set of small bells (*ibid.* p. 368) that tinkle with the movements of the wearer. Necklaces composed of bells or fringed with bells were also worn,

¹ Roscher *Lex.* ii. 1613, 15 ff. According to Preller-Robert i. 134, 'ähnliche Gebräuche beobachtete Ross *Kleinas.* 7 auf der Insel Megiste an der Kuste von Lykien.'

² Apollod. ii. 5. 6. Cf. Diod. iv. 13 κατασκευάσας χαλκῇν πλαταγὴν, καὶ διὰ ταύτης εξαίσιον κατασκευάζων ψόφον, ἐξεφόβει τὰ ζῷα, καὶ πέρασ τῇ συνεχείᾳ τοῦ κρότου ῥαδίως ἐκπολεμήσας καθαρὰν ἐποίησε τὴν λίμνην.

³ Ap. Rhod. ii. 1049 ff., Hygin. *fab.* 20. The latter expressly cp. the armed dance of the

Curetes.

⁴ Roscher *Lex.* ii. 1615, 1 ff. Reinach *Rép. Stat.* ii. 146, 1=Caylus v. 50, 1, a bronze which according to Caylus represents 'Curète frappant sur un tympanon.'

⁵ *Cat.* 318, Fig. 11.

⁶ E.g. Brit. Mus. *Use Cat.* iv. F 58. In F 303 a Maenad carries 'a tympanum in l. hand, and in r. a bell (?) painted white.'

Roscher *Lex.* i. 1085, 16 ff.

perhaps as possessing prophylactic properties. Several vases in the British Museum¹ depict Pegasus wearing a necklace of bells or *bullae*. The Louvre collection contains a couple of elaborate necklaces found by Salzmann at Camiros.² One represents a centaur and an 'Asiatic Artemis' alternately, on such thin plates of gold that it must have been intended for the dead, not the living. The other is of thicker gold and represents lions, birds, etc. Both are furnished with rows of swinging knobs or bells of gold. That such articles of jewelry had more than a merely artistic purpose cannot be proved. It is however probable, cp. Ioann. Chrys. in I Cor. xii. 7 (x. p. 125 Par.) *τί ἂν τις εἴποι τὰ περίαπτα καὶ τοὺς κώδωνας τοὺς τῆς χειρὸς ἐξηρητημένους καὶ τὸν κόκκινον στήμονα καὶ τὰ ἄλλα τὰ πολλῆς ἀνοίας γέμοντα, δέον μὴδὲν ἕτερον τῷ παιδί περιτιθέναι ἀλλ' ἢ τὴν ἀπὸ τοῦ σταυροῦ φυλακὴν*; We are inclined to compare the golden bells and pomegranates on the robe of the Jewish high-priest.³ In the *annali dell' Inst.* for 1875, p. 50 ff., Bruzza published the inscription⁴ on a small bell of gold found on the Esquiline: it reads

ΤΟΙ C O M Μ Α C Ι Ν †
 V Π Ο Τ Ε Τ Α Γ Μ Α Ι †

The archaising V (for Υ), the distribution of the letters in groups of three, and the legend itself all attest the magical character of the bell. *Τοῖς ὄμμασιν ὑποτέταγμαι*, 'I am subject to evil eyes,' seems to be a hexameter tag⁵ from some incantation. This accounts for what is otherwise inexplicable,⁶ the use of *ὄμμασιν* instead of the normal *ὀφθαλμός*. The evil eye is in prose *ὀφθαλμός βύσκανος*, *φθονερός*, or *πονηρός*; but in verse *ὄμμα* might stand, cp. Io. Tzetz. *Chil.* xii. 820 f. *πᾶσαν βασκανίαν γίνωσκε, τὴν δι' ὀμμάτων βλάβην, | διὰ φαέων βαίνουσιν⁷ καὶ βλέψεως ὀμμάτων*, Anth. Pal. xi. 193 Anon. 'Ο φθόνος ἐστὶ κάκιστος, ἔχει δέ τι καλὸν ἐν αὐτῷ. | τήκει γὰρ φθονερῶν ὄμματα καὶ κραδίην.⁸ The word *ὑποτέταγμαι* means perhaps 'I am subject to,' 'I am exposed to' evil eyes. Whoever dedicated the bell may thus have recorded on it the complaint from

¹ *Brit. Mus. Cat. Vases* ii. p. 70 ff. nos. B 62, B 63, B 65.

² Figured in Dar.-Sagl. ii. 789, Figs. 935, 936.

³ Exodus xxviii. 33 ff., xxxix. 25 f. Cf. Zech. xiv. 20 'In that day shall there be upon the bells of the horses. HOLY UNTO THE LORD.' Mr. W. Crooke (*Popular Religion and Folk-lore of N. India* p. 109) mentions priests among the Gonds who wear bells for the purpose of scaring demons.

⁴ Cp. Kaibel. *inscr. Gr. Sic. It.* no. 2409, 5.

⁵ The scansion *ὑποτέταγμαι* *nutri gratia* can be paralleled by the Homeric *εὐλακόμοροι*. *θεῖγα-τέρεις*, *κῦάνεος*, on which see Kühnert-Blass i. 308 f.

⁶ Bruzza *loc. cit.* p. 55, not perceiving the hexameter ending, explains *ὄμμα* as = *ὄραμα*,

φάντασμα, cp. Xen. *de re eq.* 9. 1 *ὥσπερ ἀνθρώπον ταραττει τὰ ἐξαπίναια καὶ ὄραματα*.

⁷ O. Jahn *loc. cit.* p. 31 n. 9 cj. *καίνουσιν* for *βαίνουσιν* cp. the grammarians' etymology of *βασκαίνειν* *viz.* *φάσει καίνειν* (schol. Aristoph. *Plut.* 571, schol. Theocr. v. 12, *Etym. mag.* 190, 26).

⁸ Cp. *C. I. G.* 6792

⁹ I cannot quote another example of this use of the word in Greek. Was it a translation of the Latin 'subjectus'? Or should we suppose, with Bruzza (p. 55 f.), that it is the bell which speaks: 'io campanello sono stato ordinato contro del fascino'. If so, 'I am subject to' must presumably mean 'I am a servant of,' 'I am used in the ritual of.' Bruzza renders *ὑποτάσσω* by '*collocare e disporre sotto a una cosa*.'

which he would be set free. Bruzza quotes another inscribed bell, again in all probability prophylactic, which bears the names of Athena, Tyche, Artemis and Hephaestus.¹

On Italian soil gongs and bells had the same significance. Coins of the gens Petillia show the façade of the second temple of Jupiter Capitolinus: in the intercolumniations are suspended by chains three gongs or bells,² one for each of the three 'cellae.' This recalls Suetonius' story about Augustus (Suet. *Aug.* 91): 'He constantly resorted to the temple on the Capitol dedicated to Jupiter Tonans, and dreamed that Jupiter Capitolinus complained of the worshippers being drawn away from himself till Augustus replied that Tonans had been installed as Jupiter's door-keeper. In consequence of this dream he shortly afterwards decked the gable of the temple (*sc.* of J. Tonans) with bells, which hung down almost to the doors.'³ Plautus in describing a sacrifice 'summo Iovi' makes Pseudolus hurry off to fetch 'hostias, | victumas, lanios...duo cum tintinnabulis.'⁴ Coins of the gens Minucia represent a column of unusual shape bearing a male figure with toga and staff. From the *abacus* are suspended a couple of gongs or bells. At the foot of the column are two lions' heads and two ears of corn. The whole is flanked by an augur with his *lituus* on the right, and a man treading on a ball (?) and clapping cymbals (?) on the left. This singular monument commemorates the public services of L. Minucius, consul in 458 B.C. and decemvir in 450 B.C., who as *praefectus annonae*⁵ detected the supposed plot of Sp. Maelius. According to Livy he was rewarded 'bove aurato⁶ extra portam Trigeminam.'⁷ But according to Pliny and Dionysius,⁸ by a column surmounted by a statue. To this statue the coin-type refers. Its details are much debated,⁹ but the gongs at least may be prophylactic.¹⁰ At the ancient festival of the Lemuria one of the ceremonies by means of which the *pater familias* drove out the ghosts was the beating of bronze vessels: Ov. *fast.* v. 441 f. 'Temesaeaque concrepat aera, et rogat, ut tectis exeat umbra suis.' Zonaras *ann.* vii. 21 states that when M. Furius Camillus triumphed for his victory over the Veientes a bell was attached to the triumphal car, and remarks that the same thing is done in the case of

¹ *Mus. Kircher.* p. 6, pl. 58, Montfaucon *antiq. erpliq.* iii. pl. 55.

² Dar.-Sagl. i. 902, figs. 1146, 1147, Duruy *Hist. Rome* ii. 725, Babelon *Monn. Rép. Rome* ii. 291 f. The enlargement of the type in Dar.-Sagl. and Duruy is due to De Koehne, *Revue de numism. belge*, 5e série, vol. ii (1870), p. 51 f., pl. iii.

³ Suet. *Aug.* 91 'ideoque mox tintinnabulis fastigium aedis redimiit, quod ea fere ianuis dependebant.'

⁴ Plaut. *Pseud.* 326-332.

⁵ Liv. iv. 13, 7.

⁶ Gronovius *cj.* 'bove et arvo'!

⁷ Liv. iv. 16, 2.

⁸ Plin. *N.H.* xxxiv. 5, 11. Item P. Minucio

praefecto annonae extra portam Trigeminam unciaria stipe collata (a memorial column was erected), *cp.* xviii. 3. 4 'Minucius Augurinus, qui Sp. Melium coarguerat, farris pretium in trinis nundinis ad assem redegit undecimus plebei tribunus: qua de causa statua ei extra portam Trigeminam a populo stipe collata statuta est.' With this agrees Dion. Hal. *περί ἐπιβουλῶν* p. xxxvi ed. C. Muller.

⁹ See Babelon *Monn. Rép. Rome* ii. 228, Morell *Thesaurus Numism.* p. 234 f., Stevenson *Rom. Coins* p. 559, Dar.-Sagl. i. 1351.

¹⁰ Babelon *loc. cit.* says: 'Les clochettes suspendues au monument servaient à annoncer l'ouverture et la fermeture du marché'!

criminals led to execution ἵνα μηδεὶς βαδίζουσιν αὐτοῖς ἐγχριμπτόμενος μιάσματος ἀναπίμπληται. In both cases evil has to be averted, on the one hand from the community and the triumphing general whose success may call down the θεῖος φθόνος, on the other hand from non-offending members of society who may be polluted by the social outcast. Bruzza *loc. cit.* p. 64 f. compares the treatment of S. Sisinius¹ and Alexandrine customs as exemplified in the ill-usage of SS. Cyrus and John² and S. Macarius.³ The Salii, who beat their *ancilia* or sacred shields with batons or weapons of some sort,⁴ are compared by Dionysius⁵ with the Curetes; and it is fairly certain that the purpose of their performance was prophylactic.⁶

Pliny *N.H.* xxxvi. 19, 4 quotes Varro's account of the mausoleum erected by Porsenna, King of Etruria, for himself at Clusium:⁷ the five pyramids that surmounted its square base were 'ita fastigatae ut in summo orbis aeneus et petasus unus omnibus sit impositus, ex quo pendeant exapta catenis tintinnabula, quae vento agitata longe sonitus referant, ut Dodonae olim factum.'

The mention of Dodona recalls us to our original question. What, in the light of these various usages, was the real meaning of the Dodonaean gong? Obviously it too was an ἀποτρόπαιον intended to preserve the sacred precinct free from pernicious influences. At first the whole series of tripods and subsequently the gong on the two columns kept up a continuous clang which was a potent means of averting evil. The interpretation thus inferred from analogous practices elsewhere does not, however, at first sight agree with what we are told as to the purpose of the gong at Dodona by certain late Greek writers. Their statements are as follows:—

Nonnus abbas in Greg. Naz. or. v. 32 (Migne xxxvi. 1015 A) τὸ δὲ περὶ τοῦ λέβητος τοιοῦτόν ἐστιν· ἐν ταύτῃ τῇ Δωδώνῃ λέγεται ὅτι ἐν ὕψει τιτὶ ἴστατο ἀνδριάς βαστάζων ῥάβδον

Cosmas in Mai *Spic. Rom.* 2. 172 ἀνδριάς ἐφ' ὕψους τις ἐστήκει βαστάζων ῥάβδον καὶ παρ' αὐτὸν ἴστατο λέβης· οἱ οὖν μαντευόμενοι ἤρχοντο κατὰ τὸν τόπον τοῦτον καὶ ἤρχοντο

Suid. s.v. Δωδώνη. καὶ ἀνδριάς ἴστατο ἐν ὕψει ῥάβδον κατέχων, καὶ παρ' αὐτὸν λέβης ἴστατο· καὶ ἔπαιεν⁸ ὁ ἀνδριάς τὸν λέβητα· ἐξ οὗ ἡχὸς τις ἐναρμόνιος ἀπετελείτο. αἱ δὲ τῶν

Schol. MS. Clark. in Greg. Naz. (Catal. p. 17) φησὶ δὲ καὶ περὶ ἀνδριάντος τινός. καὶ οὗτος δὲ ἐν Δελφοῖς ἦν φωνὴν ἐναρθρον ἀπολύων ἐξ ἐνεργείας δαιμονικῆς· ἀναρθροὶ γὰρ αἱ

¹ Ruinart *Act. Martyr.* p. 538 Verona 1731 'cum velut animal traherent sancti Sisini corpus examine, collo aerei testis tinnitum concavum ligaverunt, quod vulgus tintinnabulum vocant.'

² Mai *spicileg. Rom.* iii. 312 'tintinnabulum cum saginate magnum in collo suspendere, et cum his ad templum suum currere, et stultis sym clamare praecipunt.' Cp. the mediaeval 'fool' in 'cap and bells.'

³ *De reb. S. Macar.* cod. Vat. Riv. Zoega *Col.* Copt. p. 125 Romae 1810.

⁴ Dionys. ii. 70 mentions first λόγχην ἢ ῥάβδον ἢ τι τοιοῦθ' ἕτερον but later on τὸν ἐν ταῖς ἀσπίσιν ἀποτελούμενον ὑπὸ τῶν ἐγχειριδίων ψόφον.

⁵ *Ibid.*

⁶ See Warde Fowler *Roman Festivals* p. 39 ff. 'the old Latins believed that the Spirit which was beginning to make the crops grow must at this time [March 1] be protected from hostile demons, in order that he might be free to perform his own friendly functions for the community.'

⁷ On this famous tomb see Baumeister *Denkm.* i. 608, Martha *L'Art étrusque* p. 206 f., Dar.-Sagl. ii. 836, n. 378. With it should be compared a remarkable object in bronze said to have been found in central Italy and figured by S. Reinach in *L'Anthropologie* vii (1896), 188, fig. 441.

⁸ ἔπαιεν *V.

Nonnus abbas in
Greg. Naz. or. v. 32

καὶ παρ' αὐτὸν λέβητος
τις ἴστατο. οἱ οὖν μα-
τευόμενοι ἤρχοντο παρὰ
τὸν τόπον τοῦτον καὶ
ἠύχοντο. ὅτε οὖν ἤθελε
χρησμοφῶσαι αὐτοῖς ὁ
θεός, ὁ ἀνδρίας ἐκείνος
ἔπαιε τῇ ῥάβδῳ τὸν
λέβητα· εἶτα ἤχει ὁ
λέβητος, καὶ ἐκ τοῦ λέ-
βητος ἡχός τις ἀπετε-
λείτο ἐναρμόνιος· καὶ
ἐνεφοροῦντο αἱ προφή-
τιδες καὶ ἔλεγον ἃ αὐ-
ταῖς ὁ δαίμων ἐνέβαλλε.

Cosmas in Mai *Spic.*
Rom. 2. 172

ὅτε οὖν ἤθελε, φησὶν, ὁ
θεός χρησμοφῶσαι, ὁ
ἀνδρίας ἐκείνος ἔπαιε τῇ
ῥάβδῳ τὸν λέβητα, εἶτα
ἤχει ὁ λέβητος καὶ ἐκ τοῦ
λέβητος ἡχός τις ἀπε-
τελείτο ἐναρμόνιος καὶ
ἐνεφοροῦντο αἱ προφή-
τιδες καὶ ἔλεγον ἃ αὐ-
ταῖς ὁ δαίμων ἐνέβαλλε.

Suid. s.v. Δωδώνη·
δαιμόνων φωναὶ ἀναρ-
θοί εἰσι.

Schol. MS. Clark, in
Greg. Naz. (Catal. p. 47)
τῶν δαιμόνων φωναὶ διὰ
τὸ μὴ ἔχειν ὄργανα πρὸς
διατύπωσιν τῆς ἐξιούσης
φωνῆς.

Nonnus the abbot,¹ and Kosmas of Jerusalem² belong to Byzantine times rather than to classical antiquity. The paragraph in Suidas s.v. Δωδώνη in part agrees with Kosmas, for whom Suidas entertained feelings of the greatest veneration,³ in part recalls another scholion on Gregorius Nazianzenus. The statements of these post-classical sources have been accepted, perhaps too readily, in modern times.⁴ They may be mere guess-work, based on the well-known method of divination at Dodona by means of the whispering oak. At the same time there is some reason to believe that the sounding gong or gongs of Dodona were regarded as oracular. The scholiast on Clem. Al. *protr.* 11 speaks of them as 'an oracle of Zeus.'⁵ Callimachos in his *hymn to Delos* 286 describes the priests of Dodona as 'ministers of the never-silent caldron,'⁶ which probably implies, though it does not definitely state the mantic nature of the gong. Philostratus perhaps makes the same implication when, speaking of a view of Dodona, he says (*imagg.* ii. 33) καὶ τὸ χωρίον δὲ αὐτὸ θυῶδες, ὃ παῖ, γέγραπται καὶ ὁ μὲν ἡς μεσπτόν, χαλκῇ τε Ἠχὼ ἐν αὐτῇ τετίμηται, ἣν, οἶμαι, ὁρᾷς ἐπιβάλλουσιν τὴν χεῖρα τῷ στόματι, ἐπειδὴ χαλκεῖον ἀνέκειτο τῷ Διὶ κατὰ Δωδώνην ἡχοῦν ἐς πολὺ τῆς ἡμέρας καὶ μέχρι λάβοιτό τις αὐτοῦ μὴ σιωπῶν. Finally, the paroemiographers record some singular legends, which may bear on the point:—

Zenob. ii. 81 Βοιωτοῖς
μαντεύσαιο: αὕτη καταρα-
τική ἐστιν. Ἡρακλείδης γὰρ
φησὶ, μαντευσμένοις τοῖς Θη-
βαίοις περὶ πολέμου ἀπεκρίνατο ἡ

Plut.⁷ 9 μαντεύσεις
κατὰ τις

Codd. V. B.⁸ μαντεύσαις (B)

¹ W. Christ *Gr. Lit.*³ p. 904.

² Krumbacher *Byz. Lit.*² 137 f., 680.

³ Kosmas is described by Suid. s.v. Ἰωάννης ὁ Δαμασκηνός as ἀνὴρ εὐφυνέστατος καὶ πνέων μουσικὴν ὁλως τὴν ἐναρμόνιον. οἱ γοῦν ἀσματικοὶ καρόνες Ἰωάννου τε καὶ Κοσμᾶ σύγκρισιν ἐνὶ ἐδέξαντο, οὐδὲ δέξαιτο ἂν μέχρις ὁ καθ' ἡμᾶς βίος περαιωθῇσεται.

⁴ e.g. by Bouche-Leclercq *Hist. de la divination* ii. 306.

⁵ Schol. Clem. Al. *protr.* 11 Θεσπρωτία... ἐν ἣ ἐλέγετο μαντεῖον εἶναι Διός, διὰ λεβήτων ἡχοῦντων πως γιγνόμενον. This rather haz-

account harks back to the Demonian arrangement of a row of tripods or caldions.

⁶ Call. h. Del. 286 γηλεχέες θεράποντες ἀσιγήτοιο λέβητος.

⁷ Probably Herakleides Ponticus (W. Christ *ib.* p. 586 f.), who is cited in Apostol. x. 99 for another Boeotian story about an oracle.

⁸ The collection of proverbs fathered upon Plutarch goes back to the grammarian Seleukos, who flourished in the time of Augustus and Tiberius (W. Christ *Gr. Lit.*³ p. 605), according to O. Crusius *Ind. lect. Tub.* 1887 and 1895.

⁹ On these MSS. see p. 9, n. 7.

Zenob. ii, 84
 προφήτης ἡ ἐν Δωδώνῃ, νίκην
 αὐτοῖς ἀσεβήσασιν ἔσεσθαι. εἰς
 δὲ τῶν θεωρῶν ἀρπάσας Μυρτίλαν
 τὴν προφήτιν, ἐνέβαλεν εἰς θερ-
 μοῦ παρακείμενον λέβητα. Ἄλλοι
 δὲ φασίν, ὅτι Θηβαίοις πολεμοῦσι
 Βόμβος μάντις πλείους ἔφη νική-
 σειν, εἰ προθύσαιεν τῶν ἡγεμόνων
 ἕνα, οἳ δὲ ἀποκτείναντες τὸν
 Βόμβον ἐνίκησαν.

Plut. 9

Codd. V. B.

ἡσέβησαν γὰρ εἰς τὴν ἱέρειαν
 ἐμβαλόντες αὐτὴν εἰς τὸν ἐν
 Δωδώνῃ λέβητα ζέοντα, ἐρωτικῶς
 διατεθείσαν εἰς ἕνα τῶν θεωρῶν.

Βόμβρος

νικήσεσθαι

Βόμβρον

The story given on the authority of Herakleides states that Myrtila, a priestess of Dodona, was cast into a caldron (λέβητα) of heated water by the Thebans. The anonymous version speaks of a seer called Bombos as the victim of their sacrilege. The words Βόμβρος μάντις in this context are perhaps significant: the prophetic reverberation (βόμβος) has given rise to an eponymous prophet.

The prophylactic meaning which attaches elsewhere to the sound of beaten bronze may be reconciled with the oracular functions suggested, if not proved, by the foregoing passages. It is quite possible that the gong or gongs, which in early days served as an ἀποτρόπαιον for the oracle, came to be consulted as themselves oracular. Such a transition or development can be paralleled from certain analogous cases.¹

The game of 'kottabos' is an example in point. Introduced into Greece from Sicily,² it was commonly regarded as a kind of erotic libation.³ In its usual form, it consisted in discharging some drops of wine (λάταξ, λατάγη) from the cup in such a way as to make the upper disc or πλάστιγξ fall from its support on to the lower disc or μάνης with a loud clang: e.g. Antiplanes⁴ *μυρ.* Athen. xv. 666 F—667 A.

- B. κοτταβιεῖτε τίνα τρόπον;
 A. ἐγὼ διδάξω πάνθ' ὅς ἂν τὸν κότταβον
 ἀφείς ἐπὶ τὴν πλάστιγγα ποιήσῃ πεσεῖν—
 B. πλάστιγγα ποίαν;
 Γ. τοῦτο τοῦπικείμενον
 ἄνω τὸ μικρόν, τὸ πινακίσκιον, λέγει,
 τοῦτ' ἐστὶ πλάστιγξ.
 A. οὗτος ὁ κρατῶν γίγνεται.
 B. πῶς δ' εἴσεται τις τοῦτ';
 A. ἐὰν θίγῃ μόνον
 αὐτῆς, ἐπὶ τὸν μάνην πεσεῖται καὶ ψόφος
 ἔσται πάνυ πολὺς.

¹ For the remarkable instance of bell-worship among the Gonds of N. India see p. 28 n. 4.

² Athen. x. 427 D, xi. 479 D, xv. 666 B, 668 B, E, Aristot. *rhet.* i. 12. 1373a 23, Hesych. *ν. ν. κότταβος*.

³ Athen. x. 427 D ἦν ἀπ' ἀρχῆς τὸ μὲν σπένδειν ἀποδεδομένον τοῖς θεοῖς, ὁ δὲ κότταβος τοῖς ἐρωμένοις. This is stated on the authority of Theophrastus ἐν τῇ περὶ μέθης.

⁴ Antiplan. Ἀφροδίτης Γοναί fr. 1, 4 ff. Mein.

B. πρὸς θεῶν, τῷ κοττάβῳ
 πρόσσεστι καὶ μάνης τις ὥσπερ οἰκέτης;¹

In short, the kottabos-stand was a kind of gong which the merry-makers vied with each other in sounding. The upper disc was sometimes—perhaps traditionally—supported by a small bronze figure. Dar.-Sagl. iii. 867 f., fig. 4307, represent an existing stand surmounted by ‘un homme nu, dont le corps pose tout entier sur la jambe gauche; la droite est levée en l’air par un geste violent, comme s’il dansait ou s’il cherchait à garder son équilibre compromis; la main droite, également levée en l’air, tient un objet indistinct de forme conique.’ The tragedians, when they allude to kottabos, seem to have in view a figure of this sort. At least the point of their allusions is the frequent blows sustained by a human head.

Aesch. *Ostologoi* fr. 178 Dind. says—

Εὐρύμαχος οὐκ ἄλλος οὐδὲν ἥσσονας
 ὕβριζ' ὕβρισμους οὐκ ἐναισίους ἐμοί,
 ἦν μὲν γὰρ αὐτῷ σκοπὸς αἰὲ τοῦμὸν κára,
 †τοῦ δ' ἀγκυλητοῦ κοσσάβιός ἐστὶ σκοπὸς
 ἐκτεμὼν ἡβῶσα χεὶρ ἐφίετο.†

Eur. *Oineus* fr. 566 Dind.—

πυκνοῖς δ' ἔβαλλον Βακχίου τοξεύμασι
 κára γέροντος· τὸν βαλόντα δὲ στέφειν
 ἐγὼ 'τετάγμην, ἄθλα κοσσάβων διδούς.

Soph. *Salmonesus* fr. 482 Dind.—

τάδ' ἐστὶ κνισμὸς καὶ φιλημάτων ψόφος,
 τῷ καλλικοτταβοῦντι νικητήρια
 τίθημι καὶ βαλόντι χάλκειον κára.

All three passages mention a κára in connexion with the game. Sophocles in his Satyric drama is describing an actual kottabos-stand and speaks of the χάλκειον κára as being struck: Athen. xi. 487 D, who cites the fragment, explains this to be τὸ ἐπὶ κοττάβου ἐφεστηκός, but by a confusion² identifies it with the μάνης. Aeschylus and Euripides refer respectively to a human and a divine κára treated in the same unceremonious way. It is, then, tempting to compare the kottabos-stand with the apparatus at Dodona. In both cases we have a small bronze figure of a man on the top of a column who is instrumental in causing a clang of bronze. The resemblance would be complete, if it could be shown that the kottabos-statuettes ever carried a whip. What was the ‘objet indistinct de forme conique’ in the right hand of the statuette described by Lafaye? There is perhaps a special point in Plaut. *Trin.* 1011, where Stasimus expecting a flogging exclaims:

‘cave sis tibi ne bubuli in te cottabi crebri crepent.’

¹ Cp. our ‘dumb-waiter’ of similar shape.

² See Dar.-Sagl. iii. 868, n. 4.

The 'cowhide cottabus' that will rouse the echoes is a whip. The jest becomes more subtle if we may assume that the figure supporting the *πλάστιγξ* sometimes bore a whip. In favour of the suggestion might be cited a gloss of Hesychius and the *Etymologicum Magnum* :—

| | |
|--|--|
| <p>Hesych. <i>πλάστιγξ</i>. μάστιξ. ἡ τοῦ ζυγοῦ τὸ ἀντίρροπον καὶ τὸ νῦν λεγόμενον λίτρα. καὶ τὸ πρὸς τοὺς κοττάβους πινάκιον. καὶ μέρος τι τοῦ αὐλοῦ. καὶ σύριγγος τὸ ζύγωμα.</p> | <p><i>Etym. mag.</i> p. 674, 20 <i>πλάστιγξ</i>, ἡ μάστιξ· ἀπὸ τοῦ πλῆσσειν, παρ' Αἰσχύλῳ· <i>πλάστιγξ</i> δέ, [ἡ τοῦ ζυγοῦ.] παρὰ τὸ πλατεῖα εἶναι.</p> |
|--|--|

The passage of Aeschylus referred to by the *cf. mss.* is Aesch. *Cho.* 289 f., where the doom pronounced by Loxias upon Orestes, if he should refrain from slaying the murderers of his father, is *διώκεσθαι πόλεως | χαλκ-ηλάτῳ πλάστιγγι λυμανθέν δέμας*. Dr. Verrall *ad loc.* says: 'The context, taken in connexion with known practices about lepers, madmen, and other such outcasts, suggests that here it is some metal object, which was attached in a painful way (*λυμανθέν*) to the victim, so that he could not easily remove it, and was so made as to give a sound, warning people of his approach.¹ Small metal plates, suspended so as to clash, would have the effect and correspond to the name.' Wecklein would read *μάστιγι*. But all difficulty disappears if an early form of kottabos-stand had a bronze statuette of a man lashing a gong. The word *πλάστιγξ* properly denoting the gong or disc might easily be used by a tragedian of the metal scourge, the 'thing striking' not the 'thing struck.' However that may be, I incline to believe that the kottabos-stand was originally a feasters' gong intended as an *ἀποτρόπαιον*, and that the sound of the bronze came to be considered a love-oracle, precisely as the Dodona gong was first prophylactic and subsequently mantic.

Another example can be adduced of an apotropaeic gong whose original purpose was mistaken. We have already² seen that during the sacred drama at Eleusis the so-called *ῥαχέιον* was beaten to avert evil influences. It is probable that this was the true purpose of the series of bronze bowls or *ῥαχέα*, of which Vitruvius gives a detailed account.³ They were poised in niches (*cellae*) under or among the seats of the auditorium,⁴ and were arranged at carefully calculated intervals along one row if the theatre was small, along three if it was large. As understood in Vitruvius' day, their function was to increase the brilliance and sweetness of voices from the stage,⁵ the various notes being echoed on by the various *ῥαχέα*. Saglio in *Dar.-Sagl.* ii. 449 remarks: 'L'efficacité de ce procédé acoustique et même la possibilité d'y recourir a été tour à tour admise ou contestée.'⁶ The probability is

¹ Gusman *Pompeii* p. 146: 'Les clochettes tintaient pendant les éclipses de lune et l'on s'en servait pour conduire les criminels au sup-plice.' See the *exx.* cited above p. 20.

² See p. 15.

³ Vit. i. 1 and v. 5.

⁴ Vit. i. 1 'in cellis sub gradibus,' v. 5 'inter sedes theatri constitutis cellis.'

⁵ Vit. i. 1 'uti vox scaenici sonitus conveniens in dispositionibus tactu cum offenderit, aucta cum incremento clarior et suavior ad spectantium perveniat aures.' v. 5 'vox a scaena excitaverit auctam claritatem et concentu convenientem sibi consonantiam.'

⁶ See *ib.* n. 8.

that bronze vessels tuned according to the Vitruvian rules would take up and prolong the particular notes uttered on the stage in such a way as to produce a confused murmur or reverberation—obviously a hindrance, not a help, to the actors and the chorus. This reverberation or metallic echo was, however, to primitive ideas highly desirable as an ἀποτρόπαιον. It served to keep the precinct holy during the sacred performance. The mathematical refinements described by Vitruvius were probably a later device to ensure a continuous sound. That the Roman architect should have misconceived their purpose and ascribed to them a musical significance is in no way remarkable: for musical instruments consisting in a series of tuned bowls were not unknown to the Romans.¹

We have seen that the sound of bronze, in whatever way produced, was regarded as prophylactic. Why? Presumably because a metallic clash or clang would strike terror into the hearer. Primitive man seeks to frighten his superhuman, in much the same way as he frightens his human, foes. The banging of gongs and the ringing of bells in religious ceremonies is the counterpart of similar practices in warfare. Livy, for example, makes the consul Manlius say of the Gauls: 'quatientium scuta in patrium quendam modum horrendus armorum crepitus; omnia de industria composita ad terrorem.'² And Aeschylus, describing the equipment of Tydeus' shield, says: χαλκήλατοι κλάζουσι κώδωνες φόβον.³ Bronze was particularly efficacious in warding off evil because it was the metal consecrated to religious purposes by immemorial usage: the gods were averse to novelties and lingered in the bronze age long after their worshippers had passed on to higher levels of civilisation.⁴

The next question before us is: Why in the later Dodonaean gong was this prophylactic sound produced by means of a whip? Apparently the use of the whip was itself prophylactic.⁵ Mr. Frazer has collected from all parts of the world examples of the 'expulsion of evils': in such cases the beating of gongs is often accompanied by the cracking of whips. To quote but one instance: 'In the Tyrol...on the famous Walpurgis night...men and boys make a racket with whips, bells, pots, and pans,' while on the same occasion in the Bohmerwald mountains 'all the young fellows of the village...crack whips for a while in unison with all their strength. This drives away the witches; for so far as the sound of the whips is heard, these maleficent beings can do no harm. The peasants believe firmly in the efficacy of this

¹ Dar. Sagl. ii. 449, fig. 2594.

² Liv. xxxviii. 17.

³ Aesch. sept. 386.

⁴ Frazer *Pausanias* iii. 314, *Golden Bough*¹ i. 311 ff.

⁵ Following W. Mannhardt, Mr. Frazer has abundantly proved that whipping is a frequent form of ceremonial purification, the underlying idea being that it will drive out evil influences of all sorts; *Golden Bough*² iii. 127-133, 215-219, esp. 218 n. 1 for the whipping of inanimate

objects. To the examples there cited add the statement of Philo Alex., that farmers on the approach of a storm used once to beat the air with whips and rods (Bruzza *loc. cit.* p. 63, Lombroso *nuovi studi alessandrini* p. 41 Torino 1872). Agrippa beating the surface of the Avernian lake to dissipate its miasmas, and Xerxes laying stripes upon the Bosphorus, may have a similar signification.

⁶ *Golden Bough*² iii. 60-93.

remedy. A yokel will tell his sons to be sure to crack their whips loudly and hit the witches hard; and to give more sting to every blow the whiplashes are knotted.¹ Mr. Frazer subdivides his examples into 'occasional' and 'periodic' expulsions. The gong at Dodona (like the tomb of Porsenna to which Varro compared it) would fall under a fresh category, that of 'continuous expulsion.' It combined the clang of bronze with the lashes of a whip in such a way as to form an extremely potent *ἀποτρόπαιον*. The same combination occurs elsewhere with the same meaning. Jahn *op. cit.* p. 105 discusses the emblems found on so-called 'votive-hands.' To the examples cited by him may be added two in the British Museum.² On one of these (No. 875) a two-thonged whip represented next to a *tympanum*³ recalls the three-thonged whip and neighbouring caldron at Dodona. Again, in the cult of Rhea the whip was brought into connexion with the sound of bronze. According to Apollonius Rhodius⁴ the Argonauts propitiated Rhea with an armed dance, clashing swords and shields together: hence the Phrygians worship her with *ρόμβῳ καὶ τυπάνῳ*.⁵ The scholiast explains *ρόμβος* to be *τροχίσκος*, *ὃν στρέφουσιν ἱμάσι τύποντες καὶ οὕτως κτύπον ἀποτελοῦσιν*—in short, a humming whip-top. Such tops were commonly made of bronze⁶ and, as used in Rhea's cult, were like the *tympanum* undoubtedly prophylactic. Similarly one form of *ἰνγξ* seems to have been a whip-top.⁷ It is represented on a well-known vase belonging to the Van Branteghem collection,⁸ which depicts a young woman with a whip in her hand and a top spinning at her feet. It has not, I think, been noticed that there is an allusion to this kind of *ἰνγξ* in Pind. *Pyth.* iv. 213 ff. Aphrodite there teaches Jason how to bind Medea to his cause by means of the *ἰνγξ*—*ὄφρα Μηδείας τοκέων ἀφέλοιτ' αἰδῶ, ποθεινὰ δ' Ἑλλάς αὐτὰν | ἐν φρασὶ καιομένην δονέοι μάστιγι Πειθοῦς*, *i.e.* as Jason whips his magic top, so will love of Hellas lash the heart of Medea into a mad whirl of passion. Again, it was for prophylactic purposes that both whip and bell were attached to the car of the Roman *triumphator*.⁹ It will hardly be doubted, then, that the association of whip and gong at Dodona was designed to provide a particularly powerful means of averting evil from a particularly sacred enclosure.

¹ *ibid.* iii. 91 f.

² Brit. Mus. *Cat. Bronzes* nos. 875, 876. Elworthy *The Evil Eye* p. 327 mentions the whip on four votive-hands known to him.

³ In Roscher *Lex.* ii. 1671. fig. 6, Kybele, driving her lion-car, holds a two-thonged whip (?) in her right hand and a *tympanum* in her left. Was the combination accidental or designed?

⁴ Ap. Rhod. i. 1131 ff.

⁵ *id.* *ib.* i. 1139.

⁶ Cp. Theoc. ii. 30 *ρόμβος δ' χάλκεος*.

⁷ Fritzsche on Theoc. ii. 17. Jahn *Beachte d. s. schs. Ges. d. Wiss.* Philol.-Hist. 1854 p. 257. Lévesque in *Histoire et mémoires de l'institut*

royal de France Hist.-Litt. anc. iii. (1818), 5 ff. concludes that 'il avoit le plus souvent la forme du jouet nommé parmi nous *sabot* ou *toupie*'.

⁸ Frohner *Cat. de la coll. Van Branteghem*, no. 67 = Dar.-Sagl. ii. 1154, fig. 3087.

⁹ Zonaras vii. 21 goes off on a wrong tack: *καὶ κώδων ἀπήρτητο καὶ μάστιγ τοῦ ἄρματος, ἐνδεικτικὰ τοῦ καὶ δυστυχεῖσθαι αὐτὸν δύνασθαι, ὥστε καὶ αἰκισθῆναι ἢ καὶ δικαιωθῆναι θανεῖν. τοὺς γὰρ ἐπὶ τινὶ ἀτοπήματι καταδικασθέντας θανεῖν νερόμιστο κωδωνοφορεῖν, ἵνα μηδεὶς βαδίζουσιν αὐτοῖς ἐγχεριπτόμενος μιάσματος ἀναμίμνηται.*

It remains to ask : Why was the whole apparatus mounted on a couple of columns ? Our first inclination is to answer : For no recondite reason at all, but simply to place it out of harm's way, or perhaps because the sound would be heard better if the gong were raised to some little height. Further consideration lessens our confidence in such matter-of-fact explanations. At least it will be well to compare similar gongs in use elsewhere before coming to a hasty conclusion. In the Kri islands (S. W. of New Guinea) evil spirits are propitiated by means of gongs etc. hung from the cross bar of two poles.¹ Maori war-gongs were slung from a bar laid across two uprights and were sounded by a man who sat on a scaffolding of poles.² The *kottabos*-gong, as we have already seen, was regularly mounted on a thin column or stand and sometimes topped with a mannikin in bronze. So too the Minucian statue stood on a column, to which were attached a couple of gongs or bells. But the most striking parallel to the gong at Dodona is one first remarked by O. Gruppe,³ who drew attention to Lucian *de Syria dea* 29. The Syrian author of this important treatise⁴ describes the temple of Hierapolis and its ritual. Among other things he tells us that at the propylaea of the temple were certain *phalloi* thirty cubits in height, erected by Dionysus. Twice a year a man ascended one of them and spent a week on the top in prayer. This *φαλλοβατής*, or stylites, if so we may call him, never slept during his seven days' vigil, and he accompanied his prayers by beating a bronze gong (*ἄμα δὲ εὐχόμενος κροτέει ποίημα χάλκεον, τὸ αἰδεῖ μέγα καὶ τρηχὺ κινεόμενον*). The author adds certain views that had been held with regard to the practice : 'it is usually supposed that thus raised on high he holds converse with the gods and begs their blessings for the whole land of Syria, while they being near at hand can hearken to his prayers. Others maintain that we have in this custom a reminiscence of Deukalion's flood, when mankind in fear of the waters fled to the mountains and the tallest trees. The latter account fails to convince me any more than the former. I think however that the inhabitants act thus in honour of Dionysus. My reason for thinking so is as follows : those who erect *phalloi* to Dionysus set wooden men upon them—why, I will not explain—and, as it seems to me, this man climbs up in imitation of the wooden figure.' This remarkable passage is calculated to give us pause. There may have been some special sanctity attaching to the position of a person or thing raised on a column. 'Whatever,' says Mr. Frazer, 'is permeated by the mystic virtue of taboo may need to be isolated from earth and heaven'⁵—and one of the simplest methods of isolation would be to set the sacred object on a column, where it would be so to say suspended between heaven and earth. Of objects thus separated from the profane none were more common in Greece than tripods. Greek vase-paintings constantly represent them as standing on the top of a more or less

¹ Frazer *Golden Bough* ² iii. 63.

² G. F. Angus *Savage Life and Scenes in Australia and New Zealand* ; front. to vol. ii shows the *pahu* or war-gong being beaten.

³ *Handbuch d. kl. Alt. V.* ii. 1 p. 355 n. 7.

⁴ He probably was not Lucian : see Croiset *Hist. lit. grecque* v. 590. But cp. W. Christ *Gr. Lit.* ³ p. 747.

⁵ Frazer *Golden Bough* ² iii. 403.

attenuated column, sometimes adorned with fluttering fillets as a further indication of their sanctity.¹ Now the Dodonaean gong served instead of a whole set of tripods. It was therefore suitably placed on a pair of consecrating columns.²

The same exalted position would obviously be accorded to the whip used in connexion with the gong. An interesting analogy is here offered by the practice of the natives in some parts of N. India. Mr. W. Crooke states³ that, if the god of a village shrine 'is believed to be absent or sleeping, a drum is beaten to awake or recall him, and this answers the purpose of scaring off intruding spirits... There is one special implement which is very commonly found in the village shrines of the hill country south of the Ganges. This is an iron chain with a heavy knot at the end to which a strap like a Scotch tawse is often attached.... This is known as the *gurda*: it hangs from the roof of the shrine and is believed to be directly under the influence of the deity.' Mr. Crooke goes on to describe how 'the Baiga priest, when his services are required for the exorcism of a disease ghost, thrashes himself' with this whip. 'Among the more primitive Gonds the chain has become a godling, and is regularly worshipped.'⁴ In serious cases of epilepsy, hysteria and the like, . . . the patient is taken to the shrine and severely beaten with the holy chain until the demon is expelled.'

To sum up. I have endeavoured to prove that the gong at Dodona had two forms, an earlier and a later. At first it consisted in a series of resonant tripods arranged round the oracular shrine in such a way as to keep up a constant hum of bronze. Subsequently these tripods were replaced by a more elaborate gong—a *lebes* and a *mastigophoros* of bronze, each standing on its own pedestal, and so placed that the wind would cause a continuous vibration. From first to last the gong was an *ἀποτρόπαιον* of the most potent kind. In its original shape, the sound of bronze that echoed round the sacred precinct served to scare away all evil influences. Later on, its prophylactic virtues were intensified by the addition of the Coreyean whip and safeguarded by its elevation on a couple of columns.

ARTHUR BERNARD COOK.

¹ *E.g.* Remach *Rep. Vases* i. 23, 114, 175, 332, 363, 403, in. 4, 46, 287. *Dar.-Sagl.* i. 1353, fig. 1794.

² Cp. the two gilded eagles perched on a couple of columns before the altar of Zeus Lukaïos (Paus. viii. 38. 7).

³ Crooke *Popular Religion and Folklore of N. India* p. 60 f.

⁴ The same is true of the bell *Id. ibid.* p. 108: 'The Gonds have elevated the bell into a deity in the form of Ghagarapen.'

A PROTO-ATTIC VASE.

[PLATES II.-IV.]

I.

THE term Proto-Attic, which is our equivalent to the German Früh-attisch, and is formed on the analogy of Proto-Corinthian, is of course only a loose definition, intended to apply exclusively to a small class of Attic vases which fall between the periods represented on the one hand by the Dipylon, and on the other by the vases of the stereotyped Attic black-figure style.

For this later limit the François vase would naturally be the typical representative, were it not that, as we now know,¹ the white on that vase is laid direct upon the clay instead of in the true Attic manner upon a prepared black surface. Within these two limits we should strictly speaking place the Vourva, Marathon, and the Menidi vases, as well as the large series of 'Tyrrhenian amphorae'; and possibly yet other classes of the same kind may be found among the Acropolis fragments; but for our purpose these may be regarded rather as tributaries of the main stream, and not as proto-Attic in the limited sense.

Seeing that it is now generally agreed that the Dipylon branch of Geometric vases at least was of Athenian manufacture, the term must obviously not be pressed to its full significance any more than the correlated term proto-Corinthian. It is certainly curious that the study of vases (which in other respects is not unscientific) should absolutely bristle with loose and misleading terms: Mycenaean, Pontic, Tyrrhenian, Nolan are only some of the instances of this strange fatality. Perhaps the time may come when the thousand and one questions concerning the origins of vase-fabrics will be finally settled, and then it will be time enough to reconsider the tangle of nomenclature. For the present, however, the terms are convenient, so long as they are generally accepted: and if any further justification be needed for 'proto-Attic,' it will be found in the close analogy which this fabric bears to the proto-Corinthian.

The first serious attempt to bridge the gap between the latest Dipylon and the earliest black-figure vases of Athens was made by Bohlau in *Arch.*

¹ *Jahrbuch*, 1887, p. 281 (note on p. 135).

Jahrbuch 1887, p. 58: previously the only published landmarks for this unexplored tract were the fragments given in Benndorf's *Gr. u. Sic. Vasenb.*, pl. 54, 1-2; and Furtwangler's *Schlüssel aus Aegina* (*Arch. Zeit.* 1882, pll. 9-10, together with the fragment on p. 207). Since Bohlau wrote, however, the list has steadily increased, the most important of the new examples being the Netos amphora in *Ant. Denkm.* i, 57 and the Peiraeus amphora published by Couve in *Εφ. Ἀρχ.* 1897, pl. 5, which bring us nearer than any hitherto to the lower limit of date of the series. When the long-expected publication takes place of the fragments from the Acropolis, we shall probably have a fair idea of the stages out of which the François vase grew. It is a period of supreme importance, for it witnesses what is practically the birth of Athenian vase-painting as a separate entity: the traditions of a cramped rectilinear method are dropping away, and a flood of new life-giving impulses is setting in: any fresh material which will illumine this period is welcome, and especially a vase like that before us, which offers a store richer perhaps than any specimen hitherto known.

II.

The vase shown on Plates II.-IV. is put together from a series of fragments found in the spring of 1896 and 1897 in the excavations of the British School on the site of what we believe to have been the Gymnasium of Kynosarges. The results of these excavations went to show that the Gymnasium was erected on a site which previously to the fifth century had been in use as a burial ground. Judging from the analogy of many similar instances,¹ this large vase must have stood on the outside of a tomb in place of a stele; it was probably broken up long before the Gymnasium was built, and we found some of its fragments lying in the soil beside an angle of the large wall, along with loose fragments of human bones. Close by this spot we also uncovered the wall of a late Roman building (perhaps part of a calidarium) and among the fragments of tile which were set into the mortar of this wall I found several more pieces of our vase: probably the Roman builder had turned them up in digging his foundations and used them. The task of chipping the fragments piece by piece out of the exceedingly hard Roman mortar was a delicate and laborious one which it was impossible to entrust to the Greek workmen: and when they were safely detached, there still remained the work of cleaning each fragment. Broken as the vase was into small pieces, which were covered on both sides with lime deposit or mortar, there was at first nothing to show that they formed part of a painted vase; and they

¹ P. Schadow, *Eine attische Grablekythos*, p. 10 foll. It would be interesting to know whether any or all of these monument vases have the base perforated, with the object of allowing the drink-offerings to percolate into the tomb for the refreshment of the deceased.

Our example is too fragmentary to admit of a decision on this point. As the base is decorated, it probably belongs to the class which, as Schadow remarks, stood free on the grave, and were not partially sunk in the earth.

might easily have been rejected as worthless; but fortunately a piece of the richly decorated handle gave the clue, and as a sharp look out was kept, I think I may say with certainty that we recovered all that was possible.

As will be seen from the drawings, a large portion is unfortunately lost, but the pieces which are preserved are sufficient to enable us to restore with practical certainty both the form and nearly all the original decoration.¹

III.

The vase is one of those large amphorae or pithi which, as has been already stated, belongs to the same class as the Netos amphora (*Ant. Denkm.* i. 57.) and the Peiraeus amphora (Eφ. 'Αρχ. 1897, Pl. VII.), and stood probably on the outside of a tomb.² Like the Netos amphora, it shows traces of a metallic origin in the broad flanged lip, decorated on the under side with a row of projecting knobs,³ evidently derived from the heads of the rivets which in the metal original would have served for the attachment of the outer and inner surfaces of metal. To the same metal origin is doubtless also due the finely modelled openwork of the handles (Pl. II. Fig. f), which in our vase are much more elaborate than in either of the instances just quoted. In order to find an analogy for them, we must go to the large Boeotian pithi of the same period, which have been exhaustively studied by de Ridder in his article in *Bull. Corr. Hell.* xxii. (1898), p. 497 fol. De Ridder points out that this treatment of the handle is found also in some large amphorae from Thera, and has drawn up a list (*ibid.* p. 508) of vases showing this peculiarity; but of all those named by him, none approaches our specimen in boldness and originality of design.⁴

The basis of this form of handle appears to consist of a series of circles, one above the other, extending from the outer edge of the handle to the neck of the vase; these circles are partially filled in with two eye-shaped pieces, each consisting of a series of five similarly shaped pieces: the whole is in fact an ingenious geometric pattern composed of intersecting segments of the same

¹ The drawings were made by me and coloured by Mr. F. Anderson, who also carried out under my direction the suggested restorations of the groups of figures. After my arrival in England Dr. Zahn most kindly undertook to compare the drawings with the original in Athens, and added valuable notes upon the details of colour. I ought perhaps to explain that the white and purple are not so uniformly well preserved as the illustration might lead one to suppose: the white used for the flesh tint has particularly suffered; but the restorations are in every case justified by the actual remains of colour. The completed shape shown on Plate IV. is only a rough diagram intended merely as a key.

² The height is approximately 1.40 m., with a diameter at the lip of .586 m. It is remarkable that the proto-Attic vases of this class are all much of the same height: the Netos vase measures 1.22 m. and the one published by Couve in Eφ. 'Αρχ. 1897, pl. 5, measures 1.10 m.

³ Exactly similar knobs occur on the Netos amphora and on the tripod vase published by Couve in *B.C.H.* xxii, pl. vii: on a Boeotian pithos with reliefs (*ibid.* p. 458), they are used as an ornamental band.

⁴ An interesting illustration of the metallic origin of such handles is offered by two bronze pithi from the Polledrara tomb (Br. Mus. Cat. Bronzes Nos. 438, 439), with openwork handles which evidently belong to this category.

circle. The spaces between the large complete circles are decorated with painted lotus flowers; at the top, in place of the circle, are two smaller circles side by side, with painted centres and arching lines above, which seem clearly to be intended to represent a pair of human eyes. With this use of eyes in the decoration of handles may be compared the eyes painted beneath the handles of Melian vases,¹ which are in other respects closely related to the vases of our class. Probably in both cases the origin is to be looked for in Mycenaean art, as for example in the Warrior vase, which has eyes painted beneath the branching horn-shaped handle. Curvilinear decoration has frequently a tendency to take this form, as we see, for instance, in the pair of eyes introduced among the floral ornament of the Euphorbos pinax.

Turning now to the decoration of the vase itself, we see that the painter has divided his available space into three main fields. First, on the neck is a nearly square panel, occupied with a group of two wrestling figures, (Plate II. Fig. *a*), while a third figure, of whom only the extended hand is preserved, has been an interested spectator on the right. Of these wrestlers, unfortunately, neither is at all fully preserved, only the head, bent elbows and the legs of the figure on the left, and the lower part of the figure on the right remaining. But here again we have sufficient to admit of a fairly probable restoration; the figure on the left is evidently likely to be the victor; he has caught his opponent by the throat with both hands, and, pressing the other's head over his own left shoulder, is crushing the life out of him. The group of muscular straining figures recalls the fine lines of *Iliad* xxiii. 714:

τετρίγει δ' ἄρα ρῶτα θρασειᾶων ἀπὸ χειρῶν
ἐλκόμενα στερεῶς.

The intensity of the action is well brought out by the drawing of the two bent elbows pressing into the victim's back, and also by the contrast of the feeble action of the left hand of this figure, which helplessly, as it seems, tries to grasp the conqueror's left thigh. The head of the victor is bearded, but we are left in doubt as to the sex of his opponent. The technical peculiarities of drawing of all the scenes will be dealt with presently.

On the shoulder (Plate II. Fig. *b*) a comparatively narrow band has been decorated with the stock subject for friezes of this Orientalising period, the browsing deer: but, inasmuch as the space is limited on each side to the attachment of the handles, the artist has here treated it as a panel: only two animals are introduced, and these are symmetrically confronted.²

The largest field is that upon the body of the vase (Pl. III. and Pl. II. *c-d*); here is a great chariot drawn by a pair of winged horses which are about to

¹ *Arch. Jahrbuch*, 1887, Pl. 12.

² The browsing deer occurs singly on the Hymettos amphora, and as a frieze on the Analatos amphora, the pithos in 'Εφ. 'Αρχ. 1892 Pl. 8, and the fragment in *Ath. Mitth.* 1895, Pl. iii. It is also found on the Athenian gold

band in *Arch. Zeit.* 1884 Pl. x, 2. The nearest analogy to our group occurs on a fragment from Aegina in *Ath. Mitth.* 1897, p. 293, Fig. 18. For a discussion of its origin in Greek art, see Dümmler in *Jahrbuch*, 1887, p. 18.

start off to the right; their driver, who appears to be a woman,¹ has already raised in both hands the reins, but turns her head to look at the scene which is proceeding behind her. Standing in the car is a stately draped man who is fully turned to the left and seems to be conversing with a similarly draped figure who stands on the ground confronting him: this last figure, on the isocephalic principle, is drawn on a larger scale than the others. As to the sex of this figure again it is impossible to decide, as the flesh is in every case coloured white: but the flowing drapery is perhaps in favour of its being a woman.

As is usually the case in these large monument vases, the obverse side is alone intended to be seen: the subject decoration only extends on each side as far as the handles: the reverse in our instance has been covered with a trellis-work pattern² laid on in broad strokes of a large brush filled with the brownish black of the design. The field of each design is occupied with ornamentation designed to occupy every available space; these ornaments are partly rectilinear survivals from the geometric period; but there is already a preponderance of the floral element which is partly a survival from Mycenaean and pre-Mycenaean art, and now probably comes back into Attic painting largely through the medium of some Oriental influence. The same mixed characteristics are seen in the subsidiary bands of merely decorative pattern. On the lip is a double band of super-imposed triangles, coloured alternately black and purple; next, around the raised knobs twines a painted cable pattern, one strand painted white with a black edge, the other black: both these patterns are familiar in proto-Corinthian ware. Then comes a purely geometric design suggesting basket-work, composed of alternating hatched triangles. A geometric pattern of zigzags borders each of the designs on shoulder and body, and below the last is a floral pattern of double spiral and palmette. The lower part of the body is encircled with rays³ suggested originally by the lotos flower, and round the foot are two bands of chequers: both these designs are commonly used in the proto-Attic class.

As the reverse is practically undecorated, it is tectonically necessary to close off the designs of the obverse on each side; for the two upper subjects this is already effected structurally by the handles; but in the case of the chariot group the artist is constrained to do it with his brush: he closes the scene with a single vertical line, but with a fine artistic sense relieves the harshness of this by making it the basis of a beautiful spiral pattern with small inserted palmettes, an elaboration of the design already in use for the band around the body. The origin of this pattern is of course Mycenaean,

¹ The drapery would be equally appropriate for a male charioteer, but perhaps as the horses are winged, the figure is more probably not an ordinary mortal charioteer.

² For this pattern on the reverse of proto-Attic vases, see Couve in *B.C.H.* xvii (1893), p. 29 and the instances there quoted. To these may be added the Burgon lebes in the British Museum, Rayet *Hist. C'r.* Fig. 25. In our vase, the greater part of the reverse side

is lost, but the pattern seems to have consisted of plain broad bands, intersecting diagonally and finishing (at the upper end at any rate) in semicircular loops.

³ Unfortunately only a portion of one of these rays is preserved (Plate II., c); but it would appear from this fragment that there was not on our vase the second smaller band of rays or waves in the interstices of the larger band, such as is frequently found in proto-Attic vases.

into which art it had doubtless come from Egypt, as the well-known comparison of the Treasury ceiling at Orchomenos with the Theban tomb shows. In the very early fragment from Aegina, which is perhaps of Argive fabric, published by Pallat in *Ath. Mitth.* 1897 p. 308, Fig. 31a, an attempt is made to use a complicated spiral form for filling in the field. Spirals as a vertical border for the sides of a scene are found in Dipylon ware, as for instance on the large Boeotian amphora published in *Εφ. Ἀρχ.* 1892 Pl. 10, where a running spiral closes the reverse scene: another example is the Boeotian pithos with reliefs *B.C.H.* 1898 Pl. 5; but the most striking parallel is perhaps that offered by the advanced geometric vase from Athens published in *Ath. Mitth.* 1892 Pl. X. In that vase, which belongs to a stage between the Dipylon and proto-Attic styles, the main scene is bordered on each side with a pattern of double spirals arranged in vertical bands, which may fairly be considered the direct ancestor of the spiral pattern on our vase. Its subsequent history on vases is interesting: for in it we see the origin of the spiral and palmette ornaments which henceforward will be used, through all Attic ceramography at least, to decorate the surface below and beside the handles. It is characteristic of the general tendencies of development in the history of vase-painting that the more elaborate form should come first, and gradually simplify in the best period before expanding again in the decadence: an intermediate stage in early b.f. ware is however seen, e.g. in the vases of Exekias, who uses (*B. M. Cat. Vases*, ii B 210 for instance) a highly complicated series of spirals below his handles, which sprawl over the otherwise free field; and in the Ionian amphora in Gerhard *Aus. Vas.* Pl. 317-318. What might have happened in Attic vase-painting we see in the 'Melian' class, where this spiral pattern, starting probably from a similar origin, has spread a rank growth over the vase and becomes first a dominating and then even an exclusive feature of the design.

The clay is of the usual proto-Attic character, a warm reddish-brown, fairly levigated, with occasional fragments of stone left in, which here and there cause the surface to fly: the exterior is prepared with a thin slip of the same tone, and on this the design is laid first in brown outline. This outline, in the case of the human hair, the animals, and the chariot, is filled in with a thin black, which in parts allows the background to show through. The hand of the figure in the car is by accident also coloured black;¹ otherwise the human flesh is everywhere indicated with a wash of creamy white laid direct on the clay. In some cases this colour overlaps the brown outline, showing that, as we should expect, it was subsequently laid on. Purple (laid generally on a black background) is employed for the pupils of the eyes, and

¹ This can hardly be otherwise than accidental, and yet it is curious to note that the fingers of this hand have been carefully drawn in the manner appropriate for black silhouette, that is to say, with engraved lines. It is as if the artist, conscious that he had made a mistake, decides to make the best of it: apparently

he is unaware that he can lay his white over the black and so obtain a more brilliant effect than is acquired by laying it direct on the clay. But we are still a long way from this innovation, to which neither Sophilos nor Klitias, in the works they have left us, seem to have attained.

parts of the drapery, horses' wings, deer's neck, etc.; also to heighten the effect of portions of the floral ornaments in the field.

One very interesting feature of our vase is the introduction of the engraved line; it is of course unusual to find it, as here, in conjunction in the same vase with drawing in reserved outline: but this transitional stage is also represented elsewhere. It occurs, for instance, on the Euphorbos plate as well as on the so-called 'Rhodian' vases of mixed style, and also in a vase of Attic fabric which perhaps more nearly than any other approaches the date of our specimen. It is a fragmentary vase published by Pernice in *Ath. Mitth.* 1895, Pl. III., Fig. 2. On that vase, as on ours, the engraved line is only used for the inner markings of animals or inanimate objects; the human face is still treated in outline; the artist is not yet sufficiently at home in the new 'invention' to trust himself to make full use of it: he prefers still for the more crucial parts of his design, such as the human anatomy, to fall back on the old method of outline drawing.¹

It is a period of experiment; and so we find yet a third method of inner marking employed. The upper part of the horse's wing, which is rendered in black silhouette, has the inner details drawn in thin white lines: one wonders why this method, which obtains as a regular process on some of the sarcophagi from Clazomenae and also on the well-known vase fragments from Kyme in Aeolis,² did not find more favour in Athens: among Attic vases this is the only instance which I know of its occurrence.

So long as outline drawing was employed for the flesh of both sexes, it was natural that white colour should also be used for the flesh of both men and women: its application probably arose from a desire to throw up the human figure against the background; and even after outline drawing was abandoned, the practice still continued. Thus on the Acropolis vase of Sophilos³ the flesh of both sexes is white throughout; and on the fragments from the Acropolis published in *J.H.S.* xiii. (1892-3), Pl. XII., Fig. 1, one at least of the figures is similarly treated. In that case, the intention being to distinguish three figures side by side in separate planes, the central one is coloured white: in another group (on the l. of the design) the near figure is coloured entirely purple, the further one black. The principle is of course frequently adopted in b.f. vases of a later period, as applied for instance to the horses of a chariot, but is not found later as applied to male figures. In all these cases the white is laid directly on the ground of the clay,

¹ This seems to bear out the suggestion of Pernice *loc. cit.*, that the invention of engraving was brought about in Attic vase painting.

² Dummeler in *Rom. Mitth.* iii. (1888), Pl. VI.: his statement *ibid.* p. 160, that "für die Innenzeichnung die Gravierung sehr stark verwendet ist," is a misapprehension, due probably to the fact that he studied these fragments only from a drawing. As a matter of fact, there is no trace of engraving on them; all the

details are indicated by fine lines of white.

³ That is, on the fragments published in *Ath. Mitth.*, 1889, Pl. I., as to which Winter (*ibid.* p. 2), states definitely that such is the case. Whether this applies also to the new fragments noted by Wolters (*Jahrb.* 1898, p. 20, note 8), does not appear: in the Menidi vase attributed to Sophilos the flesh of Heracles is coloured black with purple face, as in the Netos vase.

whereas in Attic black-figure vases from Amasis downwards, it is laid on a prepared black coating.

The question is important in view of the famous reform in painting which Pliny (*H.N.* xxxv. 56) attributes to Eumarus of Athens, who is said to have been the first to distinguish the sexes. On vases it seems certain that this distinction obtained at Corinth before it reached Athens. In early Corinthian vase painting, such as the pinakes, the outline drawing is usually reserved for the flesh of women. If the Plinian story means anything, it may perhaps imply a somewhat fuller distinction, such as is found for instance on Egyptian wall-paintings and papyri of the middle kingdom—where the women are tinted white, and the men a rich brown. In the Mycenaean wall-paintings the usage seems to have been constant, as one might expect from their close association with Egyptian methods: on the Knossos frescoes, as Evans remarks (*E. E. F. Arch. Report*, 1900, p. 63) ‘the Egyptian conventions of flesh colouring are maintained—ruddy brown for men, white for women’; and the same system is found at Mycenae (*‘Eph. ’Αρχ.* 1887, Pl. 10-11). It is quite possible that it may have lasted on in wall-paintings of the Greek mainland until the time of Polygnotos at least, or even later: certainly the stele of Lyseas suggests this. But even if it died out there, this Mycenaean tradition, like so many others, survived in the Ionian schools of the sixth century. From here it seems to have affected other vase-fabrics, the Melian and proto-Corinthian at any rate and the centre (Rhodian or otherwise) which produced the Euphorbos plate. Wherever the influence reached of the *genus picturae Asiaticum*, it probably brought a trace of the Egyptian convention: on the Caere terracotta paintings it is responsible for giving the men a preposterous purple flesh tint while the women are drawn in outline. The cheerful custom of smearing a god’s face with vermilion on feast days may possibly have grown out of the same tradition: even if it had an origin in ritual,¹ it would have seemed more familiar to a people accustomed to brick-red men in their works of art. It is found in full use on a class of Ionian vases from Naucratis,² and even supposing that the wall-painters of Athens had discarded it, Ionian influence may well have caused its re-introduction into the studios of Athens. The reddish-brown which is sometimes applied to men’s flesh on Melian vases may be referred to a similar origin, and probably the habit which obtains in some proto-Attic and Corinthian vases of colouring the men’s flesh purple may be due to the same cause.³ The painter of the Euphorbos pinax (Salzmann, *Necropole de Camiros* Pl. 53) seems indeed to have employed a somewhat similar method: the figures of the warriors are there first drawn in black outline and then washed in with a pigment which seems to be a mixture of purple and thinned black:

¹ As to this, see Bosanquet in *Br. School Annual*, iii, p. 66.

² Coloured illustrations of these will appear in vol. I of the British Museum Catalogue, now in preparation.

The ‘invention’ attributed to Ecphantus

would apply if necessary to the brick-red colour of the male flesh in Egyptian and Mycenaean art. I cannot see the connection with Melos which Studniczka (*Ath. Mitth.* 1899, p. 376) suggests.

it looks as though the artist was endeavouring to supply the want of the brown flesh tint which he must have seen elsewhere but which was not included in his range of pigments. The Athenian artists, not possessing the secret of the preparation of reddish-brown colour, use purple as a compromise. The artists of the proto-Corinthian fabric in the more developed stage are acquainted with a brownish pigment which is probably intended to represent the tint used for men's flesh in Egyptian art. It is used sparingly at first, as on the Berlin Centaur vase (*Arch. Zeit.* 1883, Pl. 10) but on the Chigi vase (Karo in *Ant. Denkm.* ii. Pl. 44-45) we see it in full use.¹ So far as I know there is no instance of its occurrence in Attic vase-painting. The painters on a white ground (such as Pasiades) employ a thinned black which gives an orange tint, and this is occasionally found on the red-figure kylikes (see e.g. *B. M. Vase Cat.* iii. E. 12, E. 36) but here its use is confined to hair and drapery and is never applied to flesh. That some such method of tinting men's flesh obtained however among Attic painters of the sixth century (as distinguished from vase painters) is shown by the painting published in 'Εφ. Ἀρχ. 1887 Pl. 6, where the flesh of the warrior is coloured a rich brown.

Before turning to the subjects represented, it still remains to consider some details of style and technique not yet noted, in which the present example presents unusual features, or which may be of assistance in determining its position in the series of proto-Attic vases.

The first thing that strikes one as regards the human figures is the enormous eye, which is quite out of proportion to the size of the face, and gives a kind of '*œil de poule*' effect. One might suppose that this was due to a lack of skill on the part of the artist; and yet this can hardly be the case, seeing that in other details, such as the horses' wings, he shows that he can easily accomplish minute brush work. The true cause is I think to be found in the traditions of silhouette drawings, from which the art of this vase is not yet wholly free. In the Dipylon style, the whole face is in silhouette except the eye, which is indicated by a dot within a space left unpainted; the difficulty of making this 'reserved' space small within a washed-in silhouette is self-evident,² and we need only look at even the more advanced examples of Dipylon ware, such as the Analatos and Hymettos vases, to see that the difficulty had not then been overcome. Our artist, though working under far easier conditions, still reproduces the eye to which his Dipylon forefathers have accustomed him. More than this; it will be noticed that the spaces around the eyeball, and between eye and eyebrow, are not coloured white like the rest of the face, but are left in the ground colour.³ Now the space occupied on our vase by eye and eyebrow together, corresponds to the 're-

¹ See Pallat in *Ath. Mitt.*, 1897. p. 307 note 3, and p. 317.

² It was this difficulty which led the painters of animals on the 'Rhodian' vases, before the introduction of engraving, to leave the head, and sometimes the feet, in outline, while the body was drawn in silhouette.

³ This peculiarity was pointed out to me by Dr. Zahn. On the Menidi fragment (*Jahrbuch*, 1898, Pl. I, Fig. 1) and on the Benndorf Phaleron fragment, the corresponding space is left unpainted from the purple which covers the rest of the face.

served' space which serves for the eye on Dipylon vases: it looks very much as if our artist began by laying on a *white* silhouette in the Dipylon manner, leaving a reserved space for the eye, which however is here filled in with more detail than the black Dipylon silhouette permitted. This plan moreover had the advantage of preserving, in a measure, the contrast of colour which exists in nature between the white of the eye and the flesh.¹ In the Caere terra-cotta slabs (*J. H. S.* x, (1889), Pl. vii), a further stage is reached, the faces of the men having the white alone of the eyes left in the whitish background colour, while the flesh is coloured deep red.

In the treatment of the ear, the artist is to a certain extent breaking fresh ground, as this feature is not represented on the Dipylon heads; the result is a crude and uncertain drawing, very far removed from the elaborate decorative form of the ear on the Netos amphora or the Aegina fragment (Benndorf, *Gr. u. Sic. Vas.*, Pl. 54, 1).

The same is also true of the treatment of the hair over the forehead; in our vase the edge of the hair is an almost flat line around the face, and in profile is not indicated above the contour of the skull;² the next stage seems to be that of the Netos amphora, where the line around the face is slightly waved, and the contour is naturally rendered: even here we have not yet reached the typical archaic formalised row of spiral curls around the forehead, the first indication of which appears in the Phaleron fragment (Benndorf, *loc. cit.*, No. 2). In this respect again our vase adheres to Dipylon tradition; but just as, in the advanced Dipylon vases, some care is taken to render the long falling mass of back hair, so here this receives a careful and naturalistic treatment. This lower bunch is tied at the nape with a band, represented by a 'reserved' line; in the case of the charioteer it is coloured purple, but the fact that no trace of purple can now be seen on the upper part may be accidental: the careful arrangement in this instance in two bunches is not quite intelligible; probably the artist meant to indicate one mass as falling on each shoulder, but got into difficulties owing to the head being turned to look backward. The same care is bestowed on the wavy beard of the figure in the chariot, which terminates in three twisted ends: it offers a contrast to the closely trimmed stiff beard of Heracles, which suggests a comparison with the Egyptian form: the one is more appropriate to the workmanlike hero, the other, with its suggestion of Ionic

¹ Thiersch, *Tyrrh. amph.* p. 109, gives a somewhat different account of the reasons which led to the human eye receiving a more naturalistic treatment in the case of women (white ground) than of men (black ground). The fault of his argument seems to me to lie in the fact that he ignores the proto-Attic stages which led up to the 'Tyrrhenian' style. The earliest form of the eye in black-figure treatment is not, as he asserts, a plain engraved circle with two engraved horizontal short strokes—that is merely a careless shorthand

which occurs in all stages of b. f. ware—but the method shown on the Benndorf Phaleron and Netos examples; *i.e.* a double circle, with the angles of the eye-space correctly rendered on either side.

² This is precisely the stage arrived at in Mycenaean art such as the heads on the silver cup in 'Εφ. 'Αρχ. 1887, Pl. 7, Fig. 2a. In one of these heads, while the upper part is so treated, the part below the nape is shown as falling in three wavy coils.

ἄβρότης, is part of the gala attire in which the dead person sets out on his long journey. Both beards, as well as the pupils of the eyes throughout, are coloured purple; this polychrome treatment of the face is of course what we are accustomed to in the sculptures of the sixth century, where a conventional colouring is accepted in the desire to render the fact that hair and eyes are not all one monotone with the flesh. The purple beard is found occasionally down to a quite advanced period of the black-figure style: the purple colour for the eyeball, which may partly be due to a feeling that this colour detaches itself from the white ground of the face less staringly than black would do, is henceforward regularly used in Chalcidian vases, and occasionally on the earlier Attic b.f. vases, in the representation of women, that is to say, wherever the flesh is painted white.

The absence of moustache is in keeping with the general habit throughout early Attic and Ionic vase painting: and yet it can hardly have been a universal habit in Athens at any rate to shave the upper lip, for the moustache is occasionally found even in proto-Attic vases, and by the middle of the sixth century figures rather as a rule in Attic vases. The earliest noticeable example of a moustache known to me in Attic art is the Netos vase, where both Heracles and Nessos wear it; that of Heracles is trimly turned up in the Imperial military style;¹ that of Nessos is represented by a formless mass of horizontal wavy lines; probably the artist got into difficulties in trying to emphasise here (as he has done in the beards) the contrasted types of hero and centaur. On the little proto-Attic vase published by Böhlau in *Jahrbuch*, 1887, p. 46, Fig. 7, of two figures with beards, one has a moustache and the other has not: we may probably conclude that no special significance attached to the question, such as the well-known passage in Plutarch *Cleom.* 9 might tempt us to suppose.

The details of anatomy in the wrestling group were applied in thinned black laid on the white, and have consequently for the most part flaked off, if they ever existed; it is curious to note the strongly stylistic development which our artist has already reached in the drawing of the knee, which resembles that of Ionian art as shown for example in the sarcophagi of Klazomenae and certain vases (*J.H.S.*, 1885, p. 181).

The drapery shows no folds, but is treated simply in squared masses of colour: the chiton of the charioteer has been covered with dots, one more of the methods surviving from the Dipylon style; that of the standing figure is decorated with a diagonal scale pattern.² This pattern is of course a survival from Mycenaean³ and even pre-Mycenaean art; in the Dipylon style, where

¹ Dionysos affects the same fashion on the Acropolis fragment in *J.H.S.*, 1892-3, Pl. xi.

² This scale pattern and the fringe pattern below were both apparently painted on a white ground, but the traces are not sufficiently clear to warrant its restoration.

³ A very clear example of a dress like the one on our vase, with scale pattern all over and a fringe pattern round the hem, is shown on the ivory statuette from Mycenae, 'Εφ. 'Αρχ. 1888, Pl. 8, Fig. 4.

silhouette is the principal method, there is no scope for it, but in the proto-Attic style it again comes into prominence.¹

The chariot is of the same general form as that shown on the proto-Attic vase published by Couve in 'Εφ. Ἀρχ., 1897, Pl. 5, with the double curve in the side supporting a curving antyx, which rises in a high arch in front; this last seems to have been designed with a view to distributing more evenly the strain of the chariot pole, as well as providing an attachment for the reins when the horses were standing.² A peculiar feature of it is the twisted support which apparently comes in the centre of the arched front, and which, if our artist is accurate, tapers gently downwards. This arrangement, or rather, traces of it in a modified form, are to be found on Attic vases of the succeeding stages: on the proto-Attic vase just quoted, the upper part of the front arch of the antyx is twisted: in most subsequent instances the arch is represented in its true profile perspective, i.e. merely as an upright bar: but this bar is very often rendered in a manner which clearly shows that it is twisted like ours: such instances are the Kolchos oinochoe (*Wiener Vorlegebl.*, 1889, Pl. I. 2b); the chariot of Hermes and Maia on the François vase (Furtwängler and Reichhold, i. Pl. 1-2); and *B.M. Vase Cat.* ii. B 147, B 235, B 275. The intention is apparently to provide a purchase for anything (whether reins or polestay) which might be fastened round it: such a fastening would slip down on any upright bar which was smooth.

It is noticeable that the purely decorative group of browsing deer and the bodies of the horses are drawn in silhouette, while the human figures are rendered in a more natural colouring; the same principle seems to have been observed in the Sophilos fragments in *Ath. Mitth.* 1889, Pl. I., where the upper band has the human figures drawn in outline and filled in with white, while the lower band, apparently a decorative group of animals, is, if we may judge from the portion of wing which is preserved in silhouette, of the ordinary b. f. style. It looks as if the style which eventually became the ruling method was as yet regarded as the less successful of the two; and it seems odd that in the Phaleron fragment and Netos vase, which cannot be a great deal later than our vase, the b. f. method should already have asserted itself to the complete exclusion of the other. The reason is probably to be found in the growing familiarity of Attic artists with the engraved line: in our vase it is used only in a tentative fashion, and, in the case of the hair, even side by side with the older system of a 'reserved' line.³ For this reason I think we may claim that our vase is one of the earliest, if not the earliest, example of the use of engraving which has yet been published, at any rate among Attic vases.

The engraved line around the chariot wheel seems to be put in with a pair of compasses, or some similar appliance, which has also been used while

¹ See for instance *Ath. Mitth.* xx, (1895), Pl. iii, Fig. 2, (wing) *J.H.S.* xiii, Pl. xi, (dress). It is necessary to restate this, because Thiersch, *Tyrh. amph.* p. 138 apparently regards the scale pattern as a comparatively late introduction into Attic art.

² Euripides, *Hippolytos* 1188, μάρπτει δὲ χερσὶν ἡνίας ἀπ' ἀντρογός.

³ A similar instance of outline drawing and engraving on the same vase is the proto-Corinthian fragment from Aegina published by Pallat, *Ath. Mitth.*, 1897, p. 308.

the clay was soft to measure the circles for the openwork pattern of the handles, probably as a preparation for cutting it out; parts of these engraved circles on the handle are filled in with paint. Zahn remarks that in certain parts of the front side of the handle traces of white colour are visible beneath the paint of the ornament, and concludes that the whole of this surface was covered with white before the decoration was laid on. He also notes that two at least of the bands of pattern, viz., the hatched triangles on the neck and the zigzag band above the chariot group show traces of white within the pattern, as if these too had been previously prepared with a white ground, similarly to the handles.

From what has gone before I think we are justified in placing our vase at the head of its class, that is to say, as the earliest yet published of the series which follow the Hymettos amphora and the Analatos hydria.¹ This conclusion is borne out by a study of the ornaments in the field. Alone of the series the Kynosarges vase retains the horizontal rows of zigzags, as well as the stiff leaves or palmettes springing from the ground as in the Analatos example. The nearest analogy in this respect is offered by the Benndorf Phaleron fragment, then follows the Benndorf Aegina fragment (also of course an Attic work): then the Netos amphora, in which the field ornaments have been reduced both in size and in number, until they bear the same relative proportion to the figures of the design as, for instance, on the finer proto-Corinthian lekythi;² then the amphora published by Couve, and lastly, the Aegina bowl with the Harpies.³

IV.

The identification of the subjects, in the absence of any inscriptions, is a matter of some difficulty. In the conjunction of a struggling pair of nude figures on the neck with a departure scene on the body, one is tempted at first to recall the great Amphiaros vase in Berlin, where both these subjects are found together. On that vase the principal group is identified by inscriptions as the departure of Amphiaros (as in the chest of Kypselos, Paus. v. 17), and the wrestling group as Peleus and Hippaichmos. Neither of these identifications will apply well here; the quiet leave-taking scene is contrary to all precedent for that of Amphiaros, and the wrestling scene does

¹ I do not here include the amphora referred to by Bohlau *Aus Ion. Nekr.* p. 107, note **, which, so far as I can judge from the rough tracing kindly sent to me by Bohlau, forms an interesting link between the Analatos vase and our example. The Burgon bowl in the British Museum must be very nearly of the same period. Bohlau has very kindly further allowed me to see his notes of some small vases and fragments at Eleusis which from the character of the ornament on them may also be added as helping to fill this gap.

The large fragmentary vase from the Acropolis noted by Pernice in *Ath. Mitth.* xx, (1895) p. 125 belongs also to this intermediate group, but as it exhibits the engraved line it must be the latest of all and the nearest in date to our vase.

² Cf. *Ath. Mitth.*, 1897, p. 314.

³ Bohlau (*Aus Ion. Nekr.* p. 117), who uses the term Proto-Attic in a more limited sense, places the Harpy bowl before the Netos vase: but surely considerations of style make this improbable.

not appear on our vase to be a friendly contest, but rather a combat to the death.

For the subject on the neck of the vase, the clue is perhaps supplied in the hand of the figure on the right: this evidently belongs to a spectator who, by the action of the hand, expresses a lively interest in the contest. For this reason, as well as the deadly character of the action, the scene can hardly be an ordinary wrestling bout in the palaestra, but must represent a mythological subject: the only hero who is likely to figure in so early a stage of Attic art in such a contest is Heracles, who is already, as the Netos vase shows, coming into the scope of vase-painting; and the only personage with whom Heracles is ever associated in a scheme like this is Antaeus. The issue of the contest is already placed beyond doubt, and, as usual in all subsequent representations of this myth, Heracles is on the l.; this is in keeping with the custom which obtains through all early vase pictures of making the action move from l. to r. The third figure standing on the r. can hardly belong to Athene or Iolaus, who are usually placed on the l. beside the hero; it must belong to a sympathiser with Antaeus, perhaps his wife Andronoe or Iphinoe, who in some b. f. vases figures in this place in the scene.

It may perhaps be urged against this view, that Heracles would probably be distinguished by one or other of his characteristic attributes; in the absence of so much of the design we cannot definitely assert that this was not the case; but even if it were, a Heracles without attribute would not be without a parallel in vase-painting. The fragments of a primitive amphora or pithos in the Geometric style from Cameiros, some of which were published by Salzmänn in *Necr. de Camiros*, Pl. 39, include others which Salzmänn did not give, and which show that the Centaurs there represented are being attacked by a human figure who is hurling a spear at them. This figure can hardly be any other than Heracles, and yet he has there no distinctive attribute, any more than on our vase. These fragments from their style must be assigned to a late stage of the advanced Geometric period, a date very little preceding the date of our vase.

It seems to be a generally accepted view¹ that the Antaeus legend does not come into Greek art until comparatively late. Furtwängler remarks that it does not occur on Attic vases until the late b. f. style. But the evidence for this is of course only negative: as a matter of fact, the earliest representation hitherto known appears to be that on *Brit. Mus. Vase Cat.* ii. B 222, which by no means belongs to the late but rather to a very early stage of Attic black-figure ware. I suspect that some early unidentified wrestling scenes are renderings of the myth which have not been distinguished from typical palaestra scenes. Such an example is the adjoining Fig. 1, which is part of a frieze running around the cover of a vase² in the British Museum, B 596. The rest of the frieze is occupied with the contest of Theseus and the Minotaur in the presence of five men and two women. The group in Fig. 1

¹ Furtwängler in Roscher's *Lexicon*, and Antaios.

Wernicke in Pauly-Wissowa, *Real-Encycl.* s. v.

² Of early Attic-Ionic style.

is conceived exactly on the usual scheme of Heracles and Antaeus; the latter is even in a small way identified by a rough patch of hair on the back;¹ and yet the palaestra is so strongly in the artist's mind that he has borrowed for his l. hand spectator the figure of an athlete running with *halteres*, and only thinly disguised him by putting a cloak over his shoulders and a leaning-staff against his l. side. It was probably felt that Heracles could not wrestle in a lion-skin, and it did not at first occur to vase painters that his attributes could be hung up in the field.

From a comparison with our vase, I am inclined to think that we may identify the same subject in the Boeotian pithos with reliefs published by de Ridder in *B.C.H.* xxii (1898), pp. 497, 501. Here are two figures beginning to wrestle, and on the r. a woman in distress looking on. De Ridder suggests Heracles and Kyknos; but in all subsequent representations of the



FIG. 1.

Kyknos legend the contest is with weapons and not one of wrestling. It is true that the contest in this instance is not clearly rendered, the figure on the l. (presumably Heracles), merely grasping the other by the wrist; but this lack of clearness may easily be attributed to the limitations of the Boeotian artist, who at this stage would have found a complicated group of crossing planes impossible.

The representations of the Antaeus contest on vases of the sixth century may be divided into two principal types. In the first, which appears to be the earlier and by far the most usual, the hero locks his arms around the chest or neck of his adversary, and with head also pressing against the other's shoulder or chest, squeezes him to death;² it is this type (adaptable also for the contest with the Nemean lion) which specially distinguishes the Antaeus contest from

¹ The same detail is found in other representations of Antaeus; see for instance Gerhard, *Aus. Vas.* ii, pl. 114.

² The same type came later to be used for

the contest of Theseus with Kerkyon. see e.g. the Euphronios Theseus cup, and *Br. Mus. Cat.* iii, E 48 (Duris).

all others.¹ The second type conforms more to the rules of Greek athletics, and is borrowed direct from the palaestra; in this, Heracles, upright, grasps the neck of Antaeus in the hollow of his l. arm and pummels his adversary's head with his r. fist. This is the regular pankration, but an examination of the Antaeus scenes shows that it was comparatively seldom adopted on vase-paintings. Of the list given by Klein *Euphronios*² p. 122, the vases fall under one or other type as follows:

(i) *Squeezing type.* *a, b, g, i.* A, C, D, : to these must be added Br. Mus. B. 196 and *J.H.S.*, 1899, Pl. 1.

(ii) *Pankration type.* *c, f, E.*

A combination of both types is given in *k*, where Heracles grasps Antaeus by the neck with his l. as if to throttle him, and pummels him at the same time with his r. fist. In *e* alone is there a variant; here Heracles pulls the l. leg of Antaeus forward, and pushes the head back, so as to break his neck.

Whether the combatants stand upright, lean forward, or sprawl at full length on the ground, depends entirely on the exigencies of the space to be filled; for the narrow frieze presented by the exterior of a kylix or shoulder of a hydria, the last is of course preferred; but in any case, so long as the artists' powers remain somewhat limited, the upright composition is generally adopted, as in our vase.

As regards the chariot group, we are on more uncertain ground, especially as the sex of two of the figures is indeterminate. The arrangement of the dress of the driver suggests the female sex, but this is not conclusive evidence, when we remember that male charioteers of all ages were usually draped to the feet, and it must remain an open question. Nor are the winged horses much help: Studniczka, in publishing (*Ath. Mitth.* 1894, p. 366) a fragment from Aegina with a similar scene, remarks that the free introduction of winged horses in early art is hardly a distinction of any particular deity or hero, but is intended as the ordinary expression of the wondrous speed possessed by the horses of heroes as well as of Gods.

A similar group of a chariot containing two figures and drawn by a pair of winged horses occurs as the decoration of a dress upon the François vase, Furtwängler and Reichhold, Pl. 3, Fig. 3: the driver in this case is a bearded man, and beside him is a beardless figure wearing a polos and therefore presumably a goddess; a comparison with the almost identical group on the Melian fragment in Conze *Mel. Thong.* p. v. seems to confirm this. On the Menidi vase (*Jahrbuch*, 1898, p. 28) a similar chariot group was probably represented; and Wolters quotes the terra-cotta models of a chariot offered at the Menidi tomb as showing that, at a period not much later than that of our vase, such a group was popularly associated with the idea of the

¹ Klein's statement (*Euphronios*², p. 123, that on early b.f. vases Heracles is about to lift Antaeus in air is not the generally accepted view; this version of the myth is now recognised as of late origin. Also when he says *ibid.*

p. 124 of Heracles 'gerungen hat er nur mit Antaios,' that is only partly true, inasmuch as the contest is never what can be properly described as wrestling.

heroised dead.¹ It was indeed a conventional subject for tomb monuments already in the days of the Mycenaean stelae²; and it occurs on the Proto-Attic vase already quoted (Böhlau, *Aus Ion. Nekr.* p. 107, note **) probably in the same connection. We may therefore I think conclude that our chariot group is sepulchral; the woman who in the Menidi vase confronts the chariot, may be taken as corresponding to the figure on the l. of our group. The heroised dead man, decked out in his best, turns from the chariot of death to take a last farewell of the friend whom he is leaving on earth; it is in fact a materialised archaic rendering of *χρηστὲ χαῖρε*.

[Since the above was in type, I have seen among the fragments from the Acropolis, now in the National Museum at Athens, a fragment of a large proto-Attic vase which belongs to a stage very little later than the one here published. On it is the head of a human figure to l. closely resembling the head on the Aegina fragment (Beundorf, *Gr. u. Sic. Vas.*, Pl. 54, No. 1): the flesh is painted white, but the ear, the white of the eye, and the space between eye and eyebrow are left in the natural colour of the clay (see *supra* p. 37). The lower part of the face is wanting, so that it is uncertain if this figure was male or female: another interesting feature is the introduction of the formalised row of spiral curls on the forehead (*supra* p. 38).]

CECIL SMITH.

¹ Cf. Roscher's *Lexikon*, i, p. 2470; and Bruckner and Pernice in *Ath. Mitth.* xviii. (1893), p. 155.

² On the vases from Enkomi several instances

of this subject occur, see *Br. Mus. Excavations in Cyprus*, p. 39, Fig. 67, Nos. 832, 833, 836, 838; p. 45, Fig. 71. No. 927 shows a similar chariot drawn by winged quadrupeds.

NEW EVIDENCE ON THE MELIAN AMPHORAE

[PLATE V.]

§ 1.—*The Latest Addition to the Class.*

THE importance of the 'Melian Amphorae' in the history of early vase-painting has long been recognised, but the difficulty of locating an isolated fabric which in itself consisted of only five complete examples, all of uncertain provenance, has hitherto prevented any adequate treatment. Any extension of the class would therefore have been welcome. But the amphora which is now added to the list (*vide* Appendix) has a value in itself beyond its cumulative importance. Not only is there stronger evidence in this case than in any of the others that the vase was actually found in Melos, but the decoration of the vase adds new figure-subjects and new schemes of ornament to those previously recognised as characteristic of the class. Indeed the whole 'Melian' class as at present constituted consists of large and elaborate vases, ceramic masterpieces, each of which possesses its own individual scheme of decoration. This appears very clearly in a comparison of the present amphora with two typical examples from those previously published, namely, the *Herakles*¹ and the *Artemis*² amphorae. In the *Herakles* vase the painter has produced his effect by an elaborate and ornate treatment both of the figure-scenes and of the ornament forms. It excels both of the others in freedom of drawing, richness of field-ornament, and the elaboration of the costumes of the figures. But it lacks a certain stiff dignity both in general design and in the pose of individual figures that forms the charm of the *Artemis* amphora. This latter vase is probably the finest of the series and is approached by none of the others in the sweeping lines of the winged chariot-horses. But it suggests that its author, though a more original draughtsman than the painter of the *Herakles* amphora, was at the same time one of less experience. He has not learned the value of uniformity in the field-ornament: the spiral ornament about the legs of the horses is in thorough harmony with the design, but elsewhere it becomes petty and restless. The new amphora seems to occupy an intermediate position in point of date and style. Compared with most examples of the class, it is extremely simple in its arrangement of figures, and the general effect of the decoration is derived less from the figure-scenes and more from the size and simplicity of its spiral

¹ *Ep. 'Apχ.* 1894, p. 266 *sqq.*

² *Conze, Melische Thongefässe, Vase A.*

ornament. The characteristic field-ornament is the maeander-cross which, with its straight lines and angular forms, gives an air of severity to the whole design very different from the variegated and tapestry-like appearance given to the *Herakles* vase by the fine floral rosettes freely and evenly distributed over the field. A comparison of the neck-scenes upon the three amphorae well brings out their different characteristics.

It is just this individual character of the several 'Melian amphorae' that has rendered it especially difficult to assign to the class its true position in the history of vase-painting. The artist in marking his work with his own peculiar genius tends to obscure any sure indications of date, locality, and foreign influence. It is the more commonplace and mechanical fabrics that best reflect the artist's environment with the least refraction in passing through his own personality. It is necessary to place the master-pieces of any particular style into the background of the general fabric before the questions of date and locality can be fully discussed. Especially is this the case with the 'Melian amphorae' where the external evidence is sadly lacking, and the question can only be argued on stylistic grounds. It seemed only right, therefore, in publishing a new example of the amphorac to take note of the new evidence that has lately appeared to supply the needed background for the class. And since this new evidence has not yet been published and is somewhat inaccessible in its present position, a summary description of it is here put forward as a preface to the actual publication of the new amphora.

§ 2.—*The Rheneia Find.*

The first announcement of this new evidence was given in the Report of the Greek Archaeological Society for 1898.¹ In the summer of that year Mr. Stavropoulos, the Ephor of Antiquities at Mykonos, had, in the course of trial excavations in the island of Rheneia,² made discovery of a large deposit of human bones, mixed with pot-sherds and other objects representing a period from the seventh down to the latter part of the fifth century B.C. The deposit was all found together within a walled enclosure. This enclosure lay close to the sea-shore, almost directly opposite to the old town of Delos, which stood facing it across the narrow channel between the two islands. In the deposit lying within the enclosure Mr. Stavropoulos recognised the contents of the graves brought over to Rheneia in the course of the Great Purification of Delos undertaken by the Athenians in the year 426/5 B.C.³ (Thukydides, iii. 104, and i. 8). That the identification is correct can hardly be doubted. At two points in the enclosure were found stone coffins, some

¹ Πρακτικὰ τῆς Ἀρχαιολογικῆς Ἑταιρείας, 1898, p. 100.

² The modern Megále Delos.

³ No trace of the earlier purification of the island by Peisistratos (Her. I. 64) has been found, though the present find includes vase-

fragments going back well beyond the middle of the sixth century. The whole question of the find in its relation to the literary authority, and the light it throws upon the system of purifications in Greece, remains to be discussed by Mr. Stavropoulos.

thirty in all, carefully sealed with lead and containing red-figure vases of the latter half of the fifth century. These coffins Mr. Stavropoulos considers to have contained the bodies still undecomposed at the time of the Purification. This gives a most welcome date, for it fixes, within a limit of two years at most, the style of red-figure painting represented on the vases.

A full description of the find as a whole, with a discussion of the many points of interest that it raises, is to appear in due course. But by the extreme courtesy of Mr. Stavropoulos it is here permitted to give a provisional account of the new evidence drawn from the find and to discuss its bearing on the 'Melian Amphorae.' That such an account is strictly provisional must be recognised from the fact that no complete vase has yet been put together from the fragments, and that a large mass of fragments still remains to be sorted.¹

The find consists mainly of pot-sherds, for most objects of any value seem to have been stolen in antiquity by the workmen engaged in removing the graves. Among these pot-sherds are represented, in greater or less proportion, most of the vase-fabrics of Greece from the seventh to the fifth century. Very numerous are the fragments of Geometric, Corinthian, black-figure and red-figure vases: less numerous the Proto-Corinthian and the fabrics of the Asian coast or the islands. The latter fabrics include Thera hydriae of the type found in Thera itself by Hiller von Gaertringen (*Arch. Anz.*, 1897, p. 78): 'Fikellura' or Samian amphorae of the type represented in *Arch. Anz.*, 1886, p. 141, No. 2943: Rhodian amphorae as *Arch. Anz.*, 1886, No. 2944: Rhodian plates of various types: and finally, fragments of two Naukratite vases, one a true Naukratite chalice and the other a bowl with friezes of 'Rhodian' goats outside and bands of white and purple on the black interior (Naukratis, Vol. II, pp. 39-40). In addition to these there are more or less isolated examples of other vases which are akin to the foregoing in general style, though certainly not of identical fabric. They do not seem to be represented elsewhere in Museums.²

§ 3.—The 'Delian' Vase-Fabric.

Quite unique in size among the other fragments was a series that can have belonged to nothing else but a group of 'Melian amphorae.' Not more

¹ The aim of the present account is simply to call attention to the find, since the publication of Mr. Stavropoulos' final account of his work cannot be expected within a year or two. Many boxes of fragments still remain to be sorted, and after the final sorting there will still be much time required for putting the vases together, no light task for a man working with a single assistant. Whatever value the present description may possess is entirely due to Mr. Stavropoulos, who has exercised the most scrupulous care in sorting the fragments and gave the most generous aid in the examination

of them. He is of course in no way responsible for the writer's mistakes or omissions.

² The detailed description of these fabrics lies outside the scope of the present paper. The whole find is of extreme interest, not only for the presence of new fabrics but perhaps even more so for the unexpected absence of so many known fabrics. Only one Mykenaeon vase occurs, and that of poor and late style. 'Samian' ware is represented by six amphorae, all of the same type; and 'Rhodian' by twenty amphorae (these also all of the same type) and a few plates.

than one or two fragments belong to any single vase; but it is clear that at least ten vases are represented, and their shape and decoration are clearly those characteristic of the true goat-head-handled 'Melian amphorae.' It is not clear why these large vases are represented by so few fragments, whereas the smaller vases, though equally broken, seem in most cases to have their full complement of fragments. It may be that these large amphorae served, as at Athens, for *σήματα* upon the outside of the grave, and so were not removed with the actual contents of the grave, though a few fragments fell by accident among them. A fragment of one of these amphorae was almost the only pot-herd of importance found during the



FIG. 1.—KEY TO DECORATION OF HYDRIA.¹ (Scale about $\frac{1}{4}$ diameter.)

French excavation of Delos itself. But in the Rhencia find these 'Melian' fragments do not form an isolated group. In the same find were fragments of a very large number of smaller vases which agree absolutely with the 'Melian amphorae' in clay, technique, ornament forms, and figure types. There can be little doubt that they actually belong to the same fabric as the larger amphorae, and that they supply at least some part of that background which was lacking to the 'Melian amphorae' in their former isolation. There seems to be no true representative of the class in any European

¹ The sketch here given represents no actually existing vase. It is a conjectural restoration based upon a number of separate fragments and is intended only to show the arrangement of the friezes and the general appearance of the vases.

In the case of this and of several other

figures in the text it seemed best to give a mere transcript of the original sketch, since the rougher drawing is often more faithful to the original. The spiral designs and other cases of finer freehand work were kindly redrawn for me in Athens by Mr. Baker-Penoyre.

museum, but at Rhencia it is represented by a larger number of fragments than any other style. The fragments found form a thoroughly homogeneous class. The clay is red and filled with shining mica-like grains. It varies considerably in its degree of firing and consequently in its hardness at the present time. The slip is laid thickly over the clay and gives a smooth, firm surface of a cream or sometimes lemon colour. The black paint is fine and true but never very lustrous. Purple is freely used, and white for line-drawing. Nearly all the vases represented by these fragments were either amphorae or hydriae. There are remains perhaps of two hundred and fifty such vases in the Mykonos Museum. The two forms of vases closely resemble one another both in shape and decoration. Fig. 1 gives the general shape of the hydriae seen in front-view, showing the horizontal side handles. At the back of the vase a vertical handle springs from the neck close under the rim and runs down to the shoulder. It is of flat riband shape, never fluted, and is almost rectangular without any further curve than a slight softening of the angle formed by its horizontal and vertical portions. The amphorae are distinguished from the hydriae by having two such vertical handles, one on each side of the neck, and by omitting the horizontal side-handles. In the hydriae the presence of the side-handles at the level of the greatest circumference of the vase divides the main frieze into four panels, whereas in the amphorae the main frieze is continuous since the vertical handles do not reach below the shoulder. On the other hand the amphorae have two equal-sized panels on the neck, whilst the hydriae have either three panels or a continuous frieze only broken at the back by the single handle. With these exceptions of the neck and the main frieze the decoration of the two forms of vase follows the same lines. The whole scheme of decoration is arranged in friezes and may be roughly tabulated thus¹ :—

HYDRIAE.

AMPHORAE.

On the lip (usually rounded in shape)—

Simple vertical or oblique lines, lunettes or chevrons.

On the neck—

(a) A profile Head in front panel with a framing on either side consisting of a band of cross-hatched lines between simple vertical lines: very rarely the hatched band is replaced by some other device: in the side panels is usually a spiral motive (cf. Fig. 6).

A profile Head in each of the two panels into which the neck is divided: the Heads are sometimes replaced by spiral motives and sometimes by figure-scenes, e.g. a Sphinx.

¹ The description of the decoration here given must, in the present incomplete state of the sorting of the vase-fragments, be considered

as tentative: nor has it been possible to enumerate all exceptional instances

(b) A continuous spiral frieze (Figs. 7 e and 8 h).

On the shoulder—

(a) A narrow band of dots, bars, circles, or 'pomegranates.'¹

(b) A wider frieze below the first containing usually either a large bar-pattern or a double-spiral design.

In the main frieze—

Here divided by the side-handles into four panels, viz. a large panel at back and front with a smaller one under each handle: the front panel holding the main scene: usually with a hatched framing on either side as on the neck. The back panel has a large volute-anthemion (Fig. 2).

The frieze being here continuous is usually occupied by a continuous design, e.g. water-fowl or running deer: sometimes, in place of the continuous design, a pair of animals occupy both the front and the back.



FIG. 2.—BACK PANEL OF HYDRIA.
(Greatly reduced.)



FIG. 3.—VOLUTE UNDER HANDLE OF
HYDRIA. (Reduced.)

In the lower friezes—

(a) A narrower band with much variety of ornament, chevrons, bar-pattern, plain or broken meander, double-spirals, or continuous returning spiral, concentric circles on a hatched background (Figs. 7 a and 8 f, g, i).



FIG. 4.—RAYS. (Reduced.)

(b) A wider band usually occupied by rays springing from the foot. The rays differ considerably in size and type (Fig. 4). Sometimes they are replaced by a large bar-pattern or a double-spiral design (Fig. 7 a).

On the foot—

A band of large black dots.



FIG. 5
HANDLE DECORATION.
(Reduced.)

¹ This upper shoulder-band seems to be copied from an actual necklace. The ornament forms used occur not only on the Heads painted

on the vase-necks but also on certain early female statues from Delos.

The vertical handles have a simple decoration, usually of the type shown in Fig. 5. The horizontal handles of the hydriac are tubular in shape and are painted black. In the panel below them is usually a volute design, as Fig. 3, but in certain cases it is replaced by a large Eye.¹

§ 4.—‘*Delian*’ Ornament Forms and Figure-drawing.

In the general scheme of decoration the two most characteristic forms are the *Heads* and the *spiral* ornament. The representation of the human head as a form of ornament is common to several vase fabrics:² but it is unusual to find, as at Delos, the female head so employed. The only true parallel is in the ‘*Melian amphorae*’ where the common usage is supported by similarity of drawing. The Heads are all drawn in profile except in one case where there is apparently a Head drawn in full face, though the fragment containing it is so much obliterated that it is hard to be certain of it. The face is always in outline, and in the best examples the profile runs in a true unbroken line from forehead to chin. In the weaker examples the line is broken either

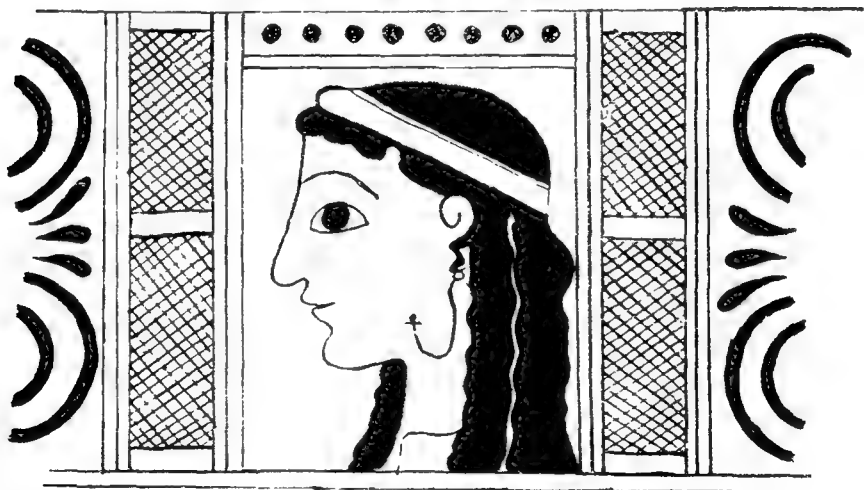


FIG. 6.—PANEL FROM NECK OF HYDRIA. (Scale $\frac{1}{2}$ diameter.)

at the nostril or the lips. The hair hangs down the back of the head in black silhouette divided into two masses by a wavy vertical line either painted

¹ This use of a *single* Eye under each handle has a parallel on the Thetian hydriac already mentioned (p. 18).

² Most regularly on a type of Attic black-figure amphorae (cf. Thiersch *Turcheische Amphoren*, Pl. II). More isolated instances are the Myrina vase (*B.C.H.* 1884, pl. vii) and

the Ionic amphora in Berlin No. 1674. An instance of a *female* head is on an amphora from Daphniae (*T.H. Delos*, Pl. XXXI). Less directly analogous instances occur on Corinthian, Phakian and Mykenaeen vases and on Ioni Eye-kylikes.

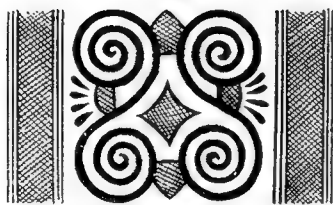
in white paint over the black or 'reserved.' On the forehead it is arranged in variously-shaped curls. Around the head is a fillet, usually painted purple with an edging of white on either side. Sometimes the fillet is elaborated by bearing a high diadem or a flower-shaped ornament in the front. The shoulders of the figure are usually seen, and the short-sleeved dress is either painted purple or decorated with a scale-pattern drawn in outline. Earrings are



(a)



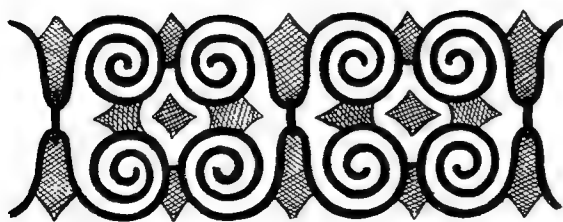
(b)



(c)



(d)



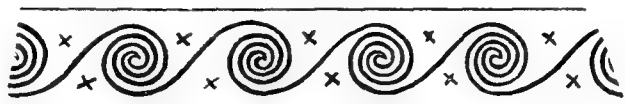
(e)

FIG. 7.—SPIRAL DESIGNS. (Scale about $\frac{1}{2}$ diameter.)

almost universally worn, and are of the form of the gold earrings from Camirus now in the Louvre (Salzmann, Pl. I.). Slight variations of the Head type are made by introducing one hand, with or without a flower, raised in front of the face (cf. the vase from Myrina, *B.C.H.* 1884, Pl. VII.): or by introducing simple forms of field ornament, as on the 'Melian Amphorae,' or

lessening the size of the Head panel and introducing a band of rays or chequer above or below it.¹

But the spiral is really the characteristic form of ornament that gives homogeneity to the whole class of vases. In many cases spiral designs practically cover the whole decorative field, and on all vases the spiral is the basis of decoration. Especially common is the double spiral. This is used in each of its three possible forms, viz., the S-shaped



(f)



(g)



(h)



(i)

FIG. 8.—SPIRAL DESIGNS.

spiral, the ordinary volute and the incurving volute. Figs. 7 and 8 show the principal variations. Nos. (b-e) and (h) are from the necks of hydriae: nos.

¹ These heads have an interesting analogy in that of the so-called Nike of Archeimos from Delos. It is perhaps dangerous to lay much emphasis upon the resemblance in the shape of skull and profile, but the coiffure and dress at least afford safe ground for argument. The hair is arranged in the same way both over the temples and at the back of the head. The necklace is of the same form in both. The

Nike has nothing but the upper rosette of the earrings still intact in the stone but the metal pendants are represented by dowel holes. She wears a similar short-sleeved chiton and the little incised circles that cover it may well be the guiding lines for a painted scale-pattern as on the chitons worn by the Head figures on the vases.

(a), (f), (g), (i), from the lower ornament bands. Fig. 2 shows a volute anthemion from the back panel of a hydria, and Fig. 3 the volute from the panel under the side-handles. These various designs illustrate two special features in the employment of the spiral forms, features to which attention had already been called in relation to the 'Melian amphorae': (a) the use of a filling in or background of cross-hatched lines, accompanied by an employment of purple 'ties' for holding the design together; (b) a filling in of the vacant angles of the design by floral palmettes.

A second class of ornament forms is that consisting of simple geometric and linear forms. These include the herring-bone, chequer, running maeander and maeander cross, rays, zeta-pattern, rosettes and bar-pattern.

Occasionally other ornament forms which do not fall within either of these two classes, the simple geometric and the spiral, occur on the vases. Chief among them is the four-petalled rosette (Fig 9), which perhaps represents a lotus-flower seen in full face. The lotus-band of the type already known in a single instance on the 'Melian amphorae' (Riegl, *Stilfragen*, Figs. 53 and 66) occurs only once, and seems to be foreign to the style.

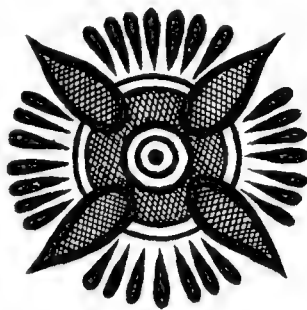


FIG. 9.

The *Figure-scenes* on these vases usually occupy the main frieze round the body of the vase though occasionally they occur on the neck. They represent, in most cases, animals or birds: sometimes a single figure standing alone in a panel (lion, swan, cock), sometimes pairs heralically opposed (bulls, boars, stags), sometimes continuous friezes (rows of water-birds or running goats). More elaborate scenes are those of a hound pursuing a goat or of a lion seizing its prey. One vase has a scene that recurs on one of the 'Melian Amphorae' (Conze, A), viz., a Head between two horses facing one another. Of the monstrous animals the Siren and Sphinx appear, the latter with a spiral anthemion crest, except in one case where it wears the high-crested helmet usually associated with Athena. The scenes with human figures are limited in number and simple in type, figures leading or riding horses, or driving in chariots. In one case a female figure is holding a grazing horse by a long cord, and in another a single figure of a young man clad in long chiton and holding a sceptre occupies the whole panel. On one vase the 'Flying Nike' figure occurs, and on another the front of a hydria is occupied by two female Heads facing one another (Fig. 10).

The drawing of the animals is vivacious, but usually follows fixed types. Two types of lion, for instance, are clearly marked and often occur on different sides of the same vase. The one has its head in profile, drawn in outline, presenting a very spirited appearance with its great teeth and lolling purple tongue. The other has the head in full face, drawn in silhouette except for the eyes. In both cases the body is drawn in silhouette, with shoulder and belly marked by purple and white lines: the

neck is often purple with white dots upon it, and there are purple patches, with an edging of white, on the back and thighs.

In technique the vases make large use of the early method of 'white line' drawing. 'Reserved' lines for marking the belly or shoulder are foreign to the style; but in certain cases the purple of the neck or belly is painted upon a reserved space and not over the black. Outline drawing, however, is common. The boars (*e.g.*) have their heads sometimes drawn in outline though more commonly in black silhouette with reserved spaces for marking the eyes. Purple is freely used both in large patches and for line drawing upon black; *e.g.*, birds' feathers are marked by white and purple lines painted over the black silhouette. White dots are occasionally painted on the purple patches. Incision occurs on what seem to be the later vases of the group. It is used most often for birds' feathers, but also in one case for decorating the purple necks of deer with little incised circles. There are some examples of incision within the outline in the same way that it is used on the great fragments of 'Phaleron' ware from the Akropolis (*Arch. Anz.* 1893, p. 16). Some of the Sphinxes and of the male human figures have the faces painted purple, and in a few cases a true flesh-colour is used resembling that of the 'Melian am-



FIG. 10.—SCENE FROM CHIEF FRIEZE OF HYDRIA. (Scale $\frac{1}{4}$ diameter.)

phorae.' As a whole the vases produce a very ornate effect by their variety of technique and free use of purple and white, and the effect is heightened by the choice and arrangement of the field ornament. The vases have a striking uniformity but certain differences of detail may be brought out by roughly grouping them in three divisions. These divisions seem to correspond to the chronological development of this style. (1) A greater measure of outline

drawing is employed and there are no inner markings in white or purple: the spiral designs are somewhat weak and tentative, and the field ornament too small and irregular. (2) The spiral ornament is drawn with greater boldness and finer sweep of line; and the field ornament is kept very uniform, often consisting of rosettes of the same shape throughout the field.¹ The profile of the Heads is drawn with a continuous and true line. (3) Somewhat petty variations complicate the spirals, foreign motives of ornament are introduced and the friezes become overladen with ornament.

The vases hitherto described are the hydriae and amphorae which comprise the great bulk of the class. But there is also a small number of vases of other shapes that evidently belong to the same fabric. Chief among them are a number of flat plates with raised rims. These differ from the Rhodian plates in having handles in place of suspension holes, and in having their decoration on the exterior, whilst the interior has only plain black bands painted upon the cream slip. One small phiale-shaped saucer has similar decoration outside and plain bands inside. A large bowl, of which only fragments of the off-set lip have been found, was adorned with the same lotus-band that occurs on one of the amphorae (p. 55). Two similar but much smaller bowls had in the one case a row of volutes between vertical lines, and in the other S-shaped spirals between similar vertical lines.

§ 5.—*Local Origin and Name.*

This new evidence, which the Rheneia find has brought to bear upon the 'Melian amphorae,' has thus given a wide extension of the class. And this extension has made it possible to lay down with greater certainty what are the essential characteristics of the class as a whole, as distinguished from what is merely characteristic of individual vases. Such characteristics put in a summary form seem to be shortly these: (*a*) A fine slip with brilliant polychrome technique. The drawing is freehand brushwork, incision being only used for minor details. The draughtsman has a fine command of technical methods, using in his drawing both plain outline, plain silhouette, and outline filled in with colour. (*b*) The decoration of the vase is arranged in friezes, the ornament forms being either simple geometric forms or freely drawn spiral motives. (*c*) The figure subjects are free and spirited in drawing. Many of them show close observation of nature, but it is controlled by the general tendency of the Hellenic imagination towards the formation of fixed types both of scenes and simple figures. (*d*) In shape and moulding the vases preserve a thoroughly plastic character with no trace of metal work. They comprise many vases of large and elaborate shape which must imply a history of development extending back over several generations of potters.

But unfortunately, the extension of internal evidence supplied by the

¹ One form of rosette that is used in this way seems to be peculiar to the style. The whole centre of the rosette is reserved in the

slip, and the black surface around it is again divided off into sections by narrow reserved lines.

vases has not been accompanied by an equal measure of new external evidence to throw light upon the date, locality, or earlier history of the style. The whole class as it appears in the Rheneia find stands strikingly isolated. In spite of the development traceable (p. 56), the vases all appear to belong more or less to the central period of the style. There are practically no transitional vases suggesting either the first beginnings or ultimate end of the fabric. The vases, too, are all on the same general level of merit. Vases of inferior manufacture are so entirely lacking as to suggest that only the contents of those graves with *σῆματα* extant at the time of the Purification were transferred to Rheneia. The graves that through age or poverty lacked any outward memorial may either have been left undisturbed or have had their contents simply thrown into the sea as not meriting a place in the new grave-enclosure. Moreover, the contents of the graves, excepting those which contained the later Attic red-figure vases, seem to have been cast into the new enclosure without any system of chronological or local arrangement. Even any certain evidence for the locality of the class is still to seek. Not that the previously-known 'Melian amphorae' can offer any serious bar to assigning the whole fabric to a Delian origin. It is fully recognised that the name 'Melian' is merely hypothetical, and that there is no conclusive evidence that the amphorae came from Melos (*vide* Appendix). Moreover, on a question of numbers alone the actual goat-head-handled amphorae found in Delos or Rheneia outnumber all those found elsewhere. But a more serious difficulty is caused by the doubt whether Delos ever produced vases from its own manufactory. The present inhabitants of Mykonos (the nearest populated island to Delos) import most of the clay for their pottery from Siphnos, for the native clay of Mykonos is coarse and black: and it is improbable that the knowledge of any good bed of clay nearer than Siphnos should have been lost since classical times, for the potter has never ceased to ply his trade among the islands of the Aegean. The fine red clay of which the Delian vases are made is not at all like the present clay of Mykonos. Both of them indeed are thickly seminated with micaceous fragments, but micaceous clay appears all over the Aegean and affords no proof of locality.¹ The evidence, then, though it is only negative evidence, makes against the existence of good potter's clay in Delos or its immediate neighbours. On the other hand, it was very easy to import raw clay into Delos, much easier than to import made vases: and it is only natural to suppose a body of potters dwelling around the temple and supplying the vessels required both for the cult of the god and for the general usage of his attendants and pilgrims. There is, therefore, at least the support of probability in holding that both the 'Melian amphorae' and their kindred vases from Rheneia belong to a Delian fabric, and in calling the whole class by the common name of Delian.

¹ I have picked up sherds of micaceous red clay as far apart as Aegina, Syra, Pergamon and Samos. The collection of modern Greek pottery in the Sévres Museum well shows the wide extension of such clay at the present day.

How far beds of similar clay may exist at different localities in the Aegean and how far there was and is one chief centre of export I do not know.

§ 6.—*Connexion with Contemporary Fabrics.*

Accepting therefore the name of Delian and the general characteristics of the whole fabric as discussed above, we have now to consider briefly the position of the fabric in the history of Greek ceramography. The nearest analogies are the sub-Mykenaeon fabrics of the South-East Aegean such as the various Rhodian, Samian, and Theran styles. The examples of these which occur at Rheneia have been mentioned above (p. 48). All of them stand at much the same period of development and have many points of kinship with one another not only in clay and technical methods but also in ornamentation. But they have by no means all followed the same line of development. On none of the other fabrics does one find the Delian characteristic of the spiral as the basis of the ornament forms. On the Theran hydriae there is a greater use of the guilloche, on the Samian of lunettes; whilst Rhodes, falling under stronger Oriental and Egyptian influence, develops the palmette and the lotus patterns. Each style, too, has its own shapes and its own figure-types. Even the great spirals that do occur on one class of 'Samian' ware are of different character from those of the Delian vases. They are rather conventionalised tendrils than geometric spirals, and approach more closely to the plant forms of the Mykenaeon style both in their suggestion of natural growth and in the freedom with which the design covers the whole body of the vase.¹ They are never confined by the purple 'ties' or hatched background which characterise the Delian spiral designs. The whole group of these sub-Mykenaeon fabrics, together with the Delian, should be considered as a series of sister fabrics. There is between them some small interchange of ornament forms: but none of them seems to have exercised any directly formative influence upon the others.

The chief influences that actively affected the ceramic fabrics of the seventh century were undoubtedly, on the one hand, the Geometric, and on the other the 'orientalizing' influence of Ionia. Delos, lying in the centre of the Aegean, might well be expected to fall to a considerable extent under both influences. In actual fact the Delian vases show very slight traces of either. In respect to the Geometric style this will hardly be in dispute. An absence of strictly Geometric patterns marks all those sister fabrics in the Aegean of which we have just spoken. Even on the Theran hydriae the linear patterns are not sufficiently numerous or characteristic to justify their classification as Geometric.² The Delian vases have only such simple forms of linear and geometric patterns as are common to all early primitive handicrafts.

But if the absence of Geometric characteristics on the vases is obvious, the reasons for such absence are more difficult to see, for one cannot doubt

¹ Cf. Riegl, *Stilfragen*, pp. 166 sqq.

² The Theran hydriae at Mykonos constantly employ a band of trellis-work pattern,

but it is of so simple a character that it can hardly be called distinctively Geometric.

the strength of Geometric influence in Greece at this period. Indeed, true Geometric vases were actually found in considerable numbers among the miscellaneous fabrics of the Rheneia enclosure: and the question of the relation of the two styles, the Geometric and the Delian, is certainly relevant to our consideration of the general position of the Delian vases.

In the case of Delos, as in all other problems connected with the Geometric style, the issues are greatly cleared by plainly differentiating two distinct classes of vases which are usually comprised under the common name of Geometric:

(1) There is first the whole class of *local* Geometric fabrics, which are the immediate sequel of decadent Mykenaeon art throughout Greece. It is a wide and somewhat ill-defined class, for the term Geometric, as so used, covers almost as many varieties of style as it does localities. It is composed of fabrics which have a uniform basis in their inheritance of Mykenaeon technique and derive their ornament forms from Mykenaeon prototypes, although they have followed very different paths in their treatment of these Mykenaeon forms. They are in fact the direct continuation of that degeneracy of Mykenaeon pottery that resulted from the overthrow of the Mykenaeon power, an overthrow that replaced the demand for such ware as the big floral vases of the Knossos palace by a demand for commoner household vessels that could be more mechanically produced. Moreover this downfall of the Mykenaeon thalassocracy was followed by an isolation of localities which inevitably tended to produce local varieties of pattern and peculiarities of design. Hence one finds different Geometric patterns as characteristic of different localities. Thus in the Boeotian Geometric the vertical zig-zag line predominates,¹ in the Argive the straight horizontal band;² whilst in Crete the 'running hound' is perhaps the commonest.

(2) To be distinguished from this there is the true Attic *Dipylon* ware, which, although no doubt originating from the degenerate forms of Mykenaeon pottery from which the other varieties of Geometric ware are sprung, yet stands quite distinct as a developed style. As if through some peculiar advantage of the Attic soil the Mykenaeon stock there sent forth a new growth which rapidly overshadowed its offshoots in other localities. Perhaps even at this early period the Attic potter is giving evidence of his versatile adaptability and innate feeling for style; he certainly worked under better conditions than his neighbours and it well may be that a settled constitution, free maritime intercourse and absence of foreign invasion combined to produce in Attica a far more rapid development than elsewhere. The decadent Mykenaeon was carried forward into what was really a new and independent style. And with the re-establishment of closer intercommunication in the Western Aegean, this Attic style seems to have been widely diffused by exportation of Dipylon ware and to have had a deep influence upon the less advanced Geometric fabrics throughout Greece. Imitation of the imported Dipylon vases everywhere tended to blot out the more primitive styles of

¹ Boeckh, *Jahrbuch* 1858, p. 349.

² *A.J.A.*, 1900, p. 65.

local development, and so to merge all the former local varieties in an apparently uniform Geometric style.¹

Both these classes of Geometric ware are represented at Rheneia. There is a number of true Dipylon vases and of local imitations of Dipylon, but at the same time there are other vases which suggest a local Geometric style. Such vases are, *e.g.*, the series of high-handled skyphoi decorated with concentric semicircles. These semicircles are usually arranged in panels on a black vase, and are often made to overlap one another. Somewhat similar vases have been found in Caria (*J.H.S.*, viii. p. 69), in Crete (*Amer. Jour. Arch.*, v. p. 311, Fig. 4: Pls. VIII. and IX.), and in Rhodes² (*Arch. Anz.*, 1886, p. 136, No. 2996); and also by Mr. Stavropoulos in certain poor graves in Rheneia itself.³

The presence of these Geometric vases at Rheneia shows clearly that—although the 'Delian style' has not absorbed any Geometric pattern either from the Attic Dipylon ware or from the decadent forms of late Mykenaeon pottery—yet the Delian potters must have had a full knowledge of the Geometric ornament forms. Under these circumstances it is hard to account for the absence of all characteristically Geometric influence in their work. It can only be explained on the supposition that some stronger influence was in operation, some style where vigour of design and freedom of brush-work could prevail even in rivalry with the refined and skilfully wrought products of the Dipylon potter.

Is this influence to be found in Ionia? It is certainly tempting to look for Ionic influence in Delos, and one can hardly doubt the great influence exercised by the industrial art of Ionia upon the Aegean at this period. But the question of Ionic influence, so far as it affects the vases of Delos, depends entirely upon the further question whether Ionia did actually possess any vase-fabrics of her own in the seventh century. For, if not, Ionic influence cannot have given its present character to the purely ceramic style of the Delian pottery. Ionia is commonly represented as the great depository of Mykenaeon culture, when the Mykenaeon power broke down in Greece and the islands, and it is from the rich store preserved in the Ionian cities that all

¹ It was this apparent uniformity of the Geometric style that gave plausibility to the theory that the Geometric ware came into Greece with the Dorian invaders as a fully developed style. But that theory is really inconsistent both with the character of the Dorian invasion and with the topographical distribution of Geometric ware in the Aegean. The same superficial uniformity of the style gave countenance also to the false use of the name 'Dipylon' to denote all Geometric ware in whatever locality it might be found. The error of that use of the name has already been pointed out by Dr. Wade and others in discussing the local variations of Geometric patterns, but the late Geometric hydria recently found

at Kavousi (*A.J.A.*, 1901, Pls. III and IV.) shows clearly that there is local variation not only in ornament forms but also in the technique of figure-drawing.

² Besides the vases from Rhodes now in the Berlin Museum, there are other vases of the same style still remaining in private possession in Rhodes itself.

³ These graves contained nothing but the small, rudely decorated vases and a series of little sickle-shaped iron instruments. Mr. Stavropoulos suggests their connection with the Carian Islanders (*Thuk.* I. 8); but the discussion of the question must await the full publication of his researches in the Cyclades.

those Mykenaeen motives which gradually found their way afresh into Hellenic art of the seventh century were drawn. At the same time Ionia was the intermediary for Oriental influence upon Hellas, and it was through her factories of metal work and textiles that Western Hellas learnt the ornament forms and fantastic conceptions of the East. In short the great change which passes over every branch of Hellenic art towards the close of the seventh century is explained by attributing it in large measure to the reaction of the Ionian cities upon the mother-country. But this Ionic influence seems always to be due to the metal or textile manufactures of Ionia, never to her *ceramic* wares. It would seem indeed that Ionia had no ceramic products to export. Nowhere in Western Asia had the potter's art developed to such a point that there could be any part for Ionia to play as intermediary for the transmission of Eastern pottery into Western Hellas. Nor is there any reason for assuming that Ionia had at this period originated any ceramic industry of her own to rival or influence the long-established factories of the islands. Excavation along the Ionian coast has revealed nothing but a few Geometric vases of the poorest type;¹ and although on the Aeolic coast to the north, fragments have been found at Myrina² and Larissa,³ which are of a style closely connected with Rhodian and other island wares, they are so few in number that one cannot deny the possibility, if not probability, of their being foreign imports.

One plausible argument for the existence of early vase-fabrics in Ionia might well be drawn from the magnificent vases produced by Ionia in the sixth century. Such vases as the Pontic amphorae, the Caeretan hydriae, the Eye-kylikes or the Daphnae fragments rival even Attic products in brilliancy of technique. But all these fabrics belong to the fully developed black-figure period of the middle of the sixth century, and there is nothing in them to necessitate that a long-established school of local pottery should lie behind them. Indeed they distinctly suggest that they did not originate in a clay fabric at all. The Caeretan hydriae are the finest representatives of the class, but in these the whole shape is metallic in design, and such details as the rosettes around the handle-bases must be copied directly from metal examples. The freshness, too, and originality of the designs can hardly have been developed in industrial art but must have been taken from larger paintings. In the Pontic amphorae, again, one naturally looks for survivals of an earlier period in the subordinate bands of decoration; but these long meaningless animal friezes are far more suggestive of Eastern metal-work than of the 'Island' style of ceramic decoration. And similar arguments apply to the other fabrics. There is nothing in them to suggest that Ionia was the great radiating centre for the pottery of the seventh century.

Nor is the argument derived from the Clazomenae sarcophagi more adequate than that based upon the vases. At the time when the sarcophagi were made, the real and living style was the black silhouette, the developed

¹ *Athen. Mittheil.* XII. 227. Cf. *J.H.S.* XVI, p. 265.

² *B.C.H.*, 1884, p. 509.

³ Bochlau, *Aus Ion. und Ital. Nkr.*, p. 86.

black-figure style that has its place at the head of the sarcophagus. The outline drawing of the foot and sides was only a survival of an earlier process of technique.¹ But there is no reason for assuming that this process belongs especially to the Asian coast. It is certainly very extensively employed by the island potters, and there is as yet no adequate evidence for its employment upon the mainland. One may therefore justly reject it as evidence for any Ionian school of pottery prior to the black-figure.

Nor again is the existence of Ionic ceramic models necessary to explain these fabrics of Greece proper which show most clearly Ionian influence. The two vase-fabrics of the mainland which are most commonly accepted as showing Ionic influence are the Corinthian and that peculiar Attic 'animal-frieze' style that first came into prominence at Vourva.² That these two styles of vases exhibit Ionic characteristics is quite true; but at the same time it is equally certain that these characteristics are not ceramic. It is a commonplace of criticism in discussing the decoration of Corinthian vases to insist on its *textile* origin.³ The adaptation of design to surface, the colour-system, the needless cross-hatching with incised lines, the overcrowding of the field with shapeless rosettes, cannot have originated in a clay product. The last feature especially is foreign to any true ceramic style. In the Delian vases themselves the development of the field ornament runs parallel with the increase of foreign influence upon the original style. On the other hand, the Vourva class of vases is characteristically *metallic* both in shape and decoration. The animal friezes with their frequent heraldic grouping and constant repetition of the same animal, the rows of uniform rosettes, the plain silhouette drawing without use of white or 'reserved' spaces, the incised lines—all are strongly reminiscent of metal-work. One detail of the animal friezes is in itself quite decisive in indication of metal technique, viz. the curious marking of the shoulder with a *double* incised line, a peculiarity which forms a universal characteristic of the Vourva class and which can be nothing else but an imitation of the raised band marking the shoulder in repoussé bronze reliefs.⁴

In support of the metallic character of this Vourva ware may be mentioned another class of vases which are of somewhat similar style and are constantly found in conjunction with it. The vases are of rough

¹ Joulin, *B.C.H.*, 1895, p. 69 *sqq.*

² *Athen. Mittheil.*, 1890, p. 318 *sqq.*. cf. the vases from the Marathon tumulus (A.M. 1893, taf. II. and III.) and from Menidi (*Jahrbuch*, 1899, p. 107 *sqq.*). Vases of this style occur at Delos, among the Akropolis fragments, at Eleusis and on other Attic sites. It is represented in many European museums.

³ *E.g.* Pottier, *Catalogue des Vases du Louvre*, II. p. 433.

⁴ This little detail is also of value in directly refuting the suggestion that the Vourva style is in any way an imitation of the Corinthian. The two styles are really quite distinct. The

Vourva style came from Ionia to Attica not by way of Corinth but from the North-East. Its connexion with Eretria has already been pointed out (Boehlan, *Aus Ion. und Ital. Nekr.* p. 116); and this connexion has recently been confirmed by further finds of Eretrian vases. Undoubtedly at times there is a certain measure of fusion between the Corinthian and the Vourva styles, but in essence the Vourva ware represents a wholly distinct influence, the influence upon Attica of the Ionian metal work, transmitted not directly up the Saronic Gulf but through the Euboean cities and the Eastern demes of Attica.

execution and unpleasing in their general effect,¹ but the large number of them and their uniformity as a class necessitate careful consideration. At first sight they would seem to be nothing but rude imitations of Vourva ware, the animal figures being roughly copied and then slashed across in all directions by a mass of carelessly incised lines. But a closer examination shows that they possess marked characteristics of their own. The figures represented are almost exclusively Sphinxes or Sirens, heraldically grouped and adorned with tall diadems. The errors of incision are repeated in the same form upon vase after vase, and this constant repetition compels the supposition that the studied carelessness is an intentional characteristic of the class; a supposition supported not only by the large numbers and wide diffusion of the vases but also by their presence at such great religious centres as Delos and Eleusis, the natural homes of hieratic conservatism. That the fabric is an Attic one is shown both by its connexion with the Vourva vases and by the localities at which it has been found,² and it is impossible to suppose that the Attic potters would have turned out such quantities of bad vases without some special purpose. That purpose is evidently imitation, and the imitation of some ware whose technique is foreign to true ceramography, the technique of metal-working.

Both Asia Minor then and the Greek mainland have as yet failed to supply any adequate evidence for considering that Ionia played any important part in the development of Greek vase-painting during the seventh century.³ Italy and Sicily offer the same forms of Ionic influence as Greece itself. The later Etruscan bucchero ware is commonly held to reflect directly the influence of Ionian industrial art.⁴ But every detail of the Etruscan bucchero vases proclaims the metal originals from which they are copied. There is not even any trace of an intermediary fabric intervening between the metal proto-type and its clay imitation. Shape, decoration and colour are all apparently directed to making the clay vessel a passable substitute for the more expensive vase of metal.

Ionia then must cease to stand for the unknown quantity in early Greek ceramography. However great may have been the influence of her metal-work and textiles upon western Greece, it cannot be used to explain the origin of any purely ceramic style such as that of the Delian vases. That origin can only be sought in some long-established school of experienced potters. It must too be a school which starting with the spiral as the

¹ This class was first collected by Thiersch *Tyrrhenische Amphoren*, p. 146. He suggests that it may be Boeotian. The objections to that view are given in the text.

² Besides the finds at Delos and Eleusis, complete vases were found at Vourva and a few fragments on the Kynosarges site by the Ilissus and in the Akropolis excavations.

³ No reference has been here made to the great finds of vases at Naukratis and Rhodes; for, although some of the minor fabrics there

found were no doubt manufactured on the Ionian coast, there is no important fabric for which an Ionian origin is assured. The evidence drawn from Rhodes and Naukratis could never do more than confirm the existence of an early school of Ionic pottery, and until vases have been found in considerable numbers on some site in Ionia itself such evidence is inadmissible.

⁴ E.g. Pottier, *Catalogue des Vases du Louvre*, I. p. 327, 377.

basis of its pattern-book has worked out the various types of spiral design. In itself indeed the spiral is so simple and universal an ornament-form that it is unnecessary to trace its primary origin back to any one single source. But the spiral designs of the Delian vases are developed along distinct and definite lines: they possess a formed and individual style of their own, and cannot be treated merely as the spontaneous product of the Delian potter.

§ 7.—*Connexion with Earlier Fabrics.*

Spiral designs of such a character as those on the Delian vases cannot be derived directly from Mykenaeen art. For, although Mykenaeen art makes such use of the spiral as is justified by its intrinsic value for decorative purposes, it is only in rare cases that it uses it as the central motive of a large body of ornament. Moreover the Mykenaeen potters did not originate the spiral. They themselves had received it as a heritage from an earlier age. The early inhabitants of the Aegean islands had worked out the various types of spiral design long before the Mykenaeen power had spread itself over the Aegean. It is the art of the pre-Mykenaeen islanders that is the real source of such works as the Stelae from the Grave Circle at Mykenae. They are directly in line with the earliest painted pottery and the incised bucchero vases of the Aegean. But if the spiral designs of the Mykenaeen age are aligned with the pre-Mykenaeen pottery, may not the Delian vases be added to the same straight line of development? The great interval of time that separates them from the earlier vases of the Aegean islands is no insuperable barrier at so early a period. If the old artistic forms of the Aegean retained such vitality as to assert themselves at the height of the Mykenaeen power, it is but natural to suppose that they would again become prominent when the weight of Mykenaeen domination was removed.

By thus affiliating the Delian vases to the early pottery of the Aegean one may offer a possible explanation of the striking isolation of the Delian style, hemmed in by the two opposing influences of the seventh century, the Ionic and the Geometric, and yet unaffected by them: a close sequel of Mykenaeen art, and yet not derived from it. It is isolated because its roots are too deeply set to be affected by any contemporary influences. It has its origin in the innate artistic impulse of the Aegean islanders, an impulse which found its natural outlet in the decoration of earthenware vessels no less in the seventh century than a thousand years earlier. In that earlier period clay had been the material out of which were made not only the vessels for eating and drinking, for the storage and cooking of food, but all the other household requisites of the primitive fisherman or herdsman. And this constant use of earthenware brought with it a wonderful sense of appropriateness in the working of clay, giving to the material its full plastic value in the modelling of vases: forming altogether such a vigorous school of pottery as might well suggest the origin of the Delian ware.

And the ornament forms of the early pottery are in full accordance

with the suggestion. The great series of painted pottery from Phylakopi¹ has been roughly divided into three periods. The first, the 'Painted

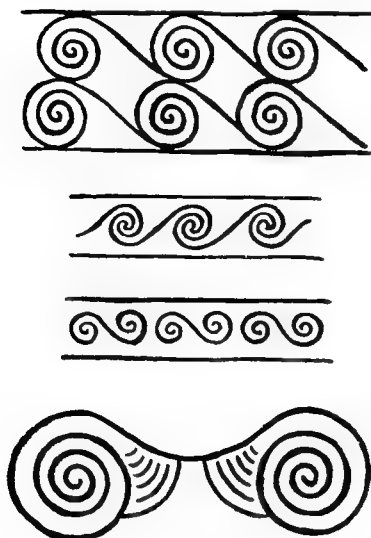


FIG. 11 —DESIGNS FROM EARLY
PAINTED VASES AT PHYLAKOPI

Geometric' period, includes the forerunners of a very large number of the Delian patterns. Simple linear patterns such as the chevron, curvilinear forms as the scale-pattern, and finally the spiral itself, form its chief decorative motives. Fig. 11 shows a selection from its spiral forms. At the same time there are other points of connexion between this period and the Delian vases. The metopic division of the field of decoration by means of bands of cross-hatched lines has already come into use. So, too, the use of Eyes as a form of ornament is common to both periods, and a parallelism to the 'necklaces' of the Delian vases (p. 51) is shown by the anthropomorphic treatment of the 'breast' vases at Phylakopi. The second, or 'naturalistic' period at Phylakopi, is very suggestive of Delian technique in its free brush-work and its polychromy, especially its rich use of red in combination with black, often in the form of a black outline around a red central mass. Its direct use of natural forms, bird, fruit, and flower, for decorative purposes had been considerably tempered by conventionalism before the time of the Delian vases, but the same naturalistic spirit breaks out again in many of the animal figures of the later vases. The third and latest period at Phylakopi seems to show the native ware after it had fallen under Mykenaeen influence. It still retains the polychrome treatment and the patterns inherited from the preceding periods, but spirit and spontaneity are gone. The decoration is compressed into friezes and the patterns are mechanical. The period, though in this respect a period of degradation, has its importance as being the nearest in time to the renescent Delian vases. It helps also to explain the origin of the uniform frieze-arrangement of the decoration on the latter vases. Both classes of vases suffer alike from a certain mechanical hardness

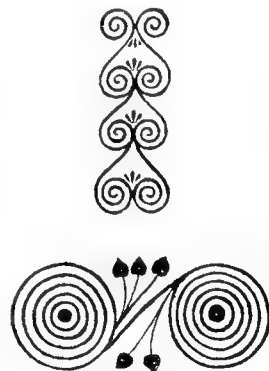


FIG. 12. DESIGNS FROM
LATER VASES AT
PHYLAKOPI.

¹ *Annual of the B.S.A.* Vol. IV, p. 37 *sqq.* No attempt has been made to assign any of the foreign fabrics found at Phylakopi to their proper localities. It is sufficient for the pre-

sent argument if the unbroken series of native ware be taken as typical for the whole Cycladic area.

which results from this exact division of the decorative surface, and both have that lack of spontaneity in the ornament forms which is due to the fact that they are the inheritance rather than the creation of the potter. Fig. 12 shows certain designs taken from the later vases of Phylakopi and indicating parallelism with the Delian ware.

§ 8.—*Conclusion.*

The comparison then of the Delian ware with the early vases of the Aegean islands as exemplified at Phylakopi indicates a close parallelism both of general principles and of details. On the one hand the Phylakopi vases represent a native Aegean school of pottery, a school possessed of a rich store of experience both in the modelling and decoration of vases, and still deriving its vigour from its direct application to the needs of daily life and its true appreciation of its material. They reveal a developed ceramic art having a free command of technical methods both in its line and colour, and having a range of patterns that extends from the simple linear forms of the earliest period, through the development of spiral and naturalistic motives, to the stereotyped friezes of the 'imitation Mykenacan.' They are, in short, the products of such a school of ceramic art as could hardly have failed to influence the later pottery within the same area.

On the other hand the renascent pottery of Delos demands in itself the existence of an earlier school of pottery to explain not only the homogeneity of its style but its power of turning out such large and elaborate vases as the 'Melian amphorae.' The lack of evidence for the period immediately preceding that of the Delian vases cannot really cut off these vases from their more remote predecessors. In the history of every locality a continuity of the minor handicrafts may justly be presumed, and in the history of the Aegean islands there is nothing to disprove such a presumption. The continuity between the earlier and the later vases, which is shown alike in their artistic spirit, in their general principles of decoration and in the detailed forms of ornament, may well be based upon a continuity of population. What was more natural than that, when Delos rose to fame as the seat of the Great Festival, the old Island craft should spring up again to new life. Here at Delos would congregate the best craftsmen of all the Cyclades, and here would come the versatile Ionians from Asia with all their novel suggestions of Oriental conceptions and designs. Here, too, would be a continuous demand not only for the statelier vases, lustral or dedicatory, employed in the service of the god, but also for those humbler vessels that served the need of the pilgrims who thronged his shrine. What else was needed to set forward a great renaissance of the old Island industry? New suggestions and new demands revived once more that art of pottery which from the beginning had had its home in the Aegean. The result was the Delian fabric, whose evidences are the 'Melian amphorae' and the potsherds of Rheneia.¹

J. H. HOPKINSON.

¹ It does not fall within the scope of the present paper to trace out the influence of the Delian style upon contemporary and later fabrics. But what has been said therein in

APPENDIX.

THREE EARLY ISLAND VASES RECENTLY ACQUIRED BY THE BRITISH SCHOOL AT ATHENS.

I.

The vases known as Melian amphorae form one of the smallest and, hitherto, one of the most detached classes in that mass of early ceramic material to which archaeologists have long been looking for a solution of some at least of the perplexed questions of the origins of Greek art. As long ago as 1854 Gerhard published in a paper dealing with the cult of the Persian Artemis a remarkable sherd¹ which was given him by Ross on his return from a tour in the Aegean islands and is now in Berlin. Some eight years later Conze published three large goat-handled amphorae² of so closely similar a technique that he was content to have his plates coloured from the Berlin fragment. Since then J. Böhler³ and K. D. Mylonas⁴ have each added one vase to the series, so that up to now the Melian fabric has been represented by five amphorae and a fragment.

To these a sixth may now be added, which is here reproduced (Fig. 1). The fragments of this were purchased in Melos, during the recent excavations of the British School at Phylakopi, by Mr. Cecil Smith, who satisfied himself that the vase was actually found in the island and at the spot asserted by the vendor. There were indications that in antiquity the vase was not buried in the grave, but stood above and outside it. The fragments have since been skilfully rearranged, and it now stands, largely, it must be admitted, in plaster,⁵ in the small collection of the School at Athens.

respect to 'Ionic' influence carries with it the position that much of the so-called Orientalizing influence upon the mainland fabrics—that influence which, *e.g.*, developed the Phaleron and Early Attic styles out of the Dipylon—must be accredited to Delos.

¹ *Arch. Zeit.* 1854 Pl. LXI.

² A. Conze, *Melische Thongefässe*, Leipzig, 1862. These vases, lettered A, B, C, by Conze, are now in the Ethn. Museum at Athens, where they are numbered 911, 912, 913. They were unearthed in Athens at the time of their publication, when two of them were found in the Royal Palace, the third at the house of one of the ministers. All three however were said to have come from Melos. Vase A is the most important of these, and is referred to in the text as the 'Apollo and Artemis' vase, being that which has for its main figure-subject a representation of Apollo and three Muses in a chariot confronting Artemis who holds a stag by the horns. Those who are familiar with the originals are well aware that the large reproductions in Conze's work are in some respects misleading. In the lithographed plates the colour of the ground is too brown and too dark. In the others the use of dotted surfaces for purple is confusing, and the original effect of certain kinds of field ornament cannot be given

by tracing their outlines.

³ *Jahrbuch*, 1867, pp. 211–215, Pl. XII. No. 914 in the Ethn. Museum. This vase, which is considerably smaller than the others, is fitted with a cover. Strictly speaking it has no figure-subjects, the human, animal and mythologic forms being merely decorative. Its provenance is unknown.

⁴ *Ephem. Archaeol.* 1894, pp. 226–238, with a general sketch and two coloured plates by M. Gilliéron. This amphora, which is numbered 954 in the Museum, was said by the vendor, but without support of evidence, to have been found in Crete. It is referred to in the text as the 'Herakles' vase from its main figure-subject.

⁵ The whole vase is unfortunately in very bad condition. Large portions were missing altogether, and the surface and edges of those which remain were so much worn as to make their readjustment difficult. This task has been successfully accomplished by members of the British School and by the mender to the Ethn. Museum. In the drawings an attempt has been made to reproduce what a prolonged examination reveals to have been present once, rather than to suggest the features still visible on a casual inspection.



FIG. 1.—VASE FROM MELOS (about 1 · 5).

The amphora is the largest of its class, measuring 1.07m. in height, while the perimeters of the neck and body are 1.49m. and 1.8m. respectively. The close analysis of the Herakles vase by M. Mylonas in the *Ephemeris* makes a detailed description of its decorative scheme unnecessary, as the two vases, though by no means identical in style, have much in common. The vertical edge of the lip shows a decoration of black squares. On the neck is a figure-subject limited on either side by a narrow panel of hatching finished at top and bottom by a purple band, the remaining and larger portion of the surface of the neck being occupied by a finely drawn pattern of large spirals. At the junction of the neck and body is a narrow frieze, composed of a bar pattern on the obverse side of the vase, and changing to a key-pattern on the reverse. This feature reappears on the Herakles vase. On the body of the amphora and beneath the panel of the neck comes the main figure-subject, corresponding to a secondary and similar panel on the reverse. For these the vertical hatched borders are formed by the extension of the goat handles at the sides. Beneath each of the handles is represented a pair of human eyes, a large inverted volute descending between them from the central axis. The decorative scheme below this level is complete enough to be understood from the illustration. Only one fragment of the foot was discovered, but it is sufficient to show that the base was of the normal Melian type, both in its decoration and in the characteristic narrow rectangular openings by which it was pierced.

The vase is of a red clay seminated with micaceous fragments, and was covered originally with a lemon-coloured slip. On this the decorative work is painted mostly in black varnish paint. The male flesh is painted with a pigment resembling burnt sienna up to a black outline, and purple is used for the decoration of the dresses and for the ties of the spirals. It may well be that white was employed, as for dot-rosettes on the draperies, but of this it is impossible to be certain. The work is throughout freehand and the drawing occasionally of a spirited and original kind. In the frieze of spirals immediately below the main figure-subject may be seen a good instance of the artist's independence of mechanical aid. The motive of cursive spirals not fitting satisfactorily into the space at his command, he effects his join, sans phrase, by a spiral form of a different character. Quite a variety of technical methods are employed in the panels. The female faces are in pure outline, the male in outline filled in with colour. The upper garments are in black silhouette, the under are rendered by hatchings of various design upon the slip. Of incised lines occasional use is made, but apparently only in accessories.

Of the figure-subjects the best preserved, which is that on the neck of the vase, is reproduced on Pl. V. Here, as on the corresponding panel of the Herakles vase, two figures, a male and a female, face one another in an ornamented field. The former is bearded and has a purple fillet in his hair. He wears a long striped chiton, and over this a full purple-bordered himation hanging evenly from either shoulder. He has black foot-gear reaching above his ankles, and carries a cantharus in his right hand. The female figure wears a long chiton bordered at the top and bottom, with the rest of its surface painted with hatched lines. She has a himation similar to her companion's which she draws forward with her right hand—the idiom of mode-ty in Greek art, though it is more often the bridal veil that is thus extended.

Who are these decorous figures that thus confront each other apparently in grave converse? An interesting parallel, suggested by Professor Percy Gardner, is furnished by that Spartan Stele on which are represented a male and female figure seated side by side, the female holding a cantharus. It is possible on this analogy that the panel may represent some phase of that ancestor worship which holds an important, but scarcely yet a defined, place in the long record of Greek belief. By another interpretation the cantharus would suggest Dionysus. If this be accepted, the figure seems to represent not so much the Thracian lord of mischief as the kindly, one might say the homely, patron of the island vineyards. Of oriental attributes he has none, unless his flowing robes be considered as such. If the male figure is Dionysus, there is a good deal to be said for identifying his companion as Ariadne. Mythologic scenes were certainly represented on these amphorae, and her story was told in Naxos, and so may be said to belong to the Cyclades. But though



(About 1-3).



FIG. 2.—SMALL BOWL FROM MELOS.

a single figure would seem at first sight to require some such definite identification, it should be remembered that we have on the neck of the Herakles amphora a closely similar figure-subject in which Hermes is seen confronting a female figure for whom it seems impossible to find a definite identification. From this analogy it would perhaps be better to consider the lady on our vase merely as a complementary figure—perhaps in this case a Maenad introduced as an appropriate companion to the god. In these early days even a Maenad might be thus decorously attired.

On the body of the vase and below this panel was the principal figure-subject of which scanty traces remain. Close inspection of these and careful comparison with other Melian amphorae enable us to reconstruct the main outlines of the picture, but not its details, nor its interpretation. A bearded charioteer, grasping goad and reins in his right hand, stands in a chariot drawn by winged horses. Behind the chariot walks a lady in hatched chiton and black himation, while on the off-side of the horses, and facing the charioteer, stands a similar figure holding a tripartite flower in her hand. There appears to be nothing in the dress or attributes of the figures nor in their number or disposition, to enable us to assign any definite mythological significance to the scene, though from the corresponding chariot scenes on other Melian vases and the wings given to the horses in this case, it seems likely that some at least of the figures represent divine personages. A certain quietude in pose, which is still to be detected in the scanty remnants of the panel, makes it unlikely that any vigorous or animated episode, such as that which forms the main figure-subject of the Herakles amphora, was here represented. What is left would be more in keeping with a scene of funeral significance, such as we should expect to find on an amphora obviously devoted to funeral purposes. On the reverse side of the vase was a corresponding panel, of which just sufficient remains to enable us to say, with the help of analogous vases, that it represented, after an heraldic fashion, two horses facing each other across an elaborate spiralforn ornament.

It can hardly be doubted that the new amphora takes an intermediate place in the series of Melian vases. The scanty remains of the figures have a certain stiff dignity equally removed from the naive attempts of the earlier amphorae and the opulent mannerism of the later. This angular beauty is heightened not only by the free use of the 'windmill' as an element of design in the field, but also by the draperies with their straight folds, simple hatchings and broad unpatterned borders. Lastly, that the artist, if earlier in date, had a finer eye for design than his successor, cannot be doubted, if we pay heed to the rest of the decoration of the vase. On none are the spirals better drawn, more simply and more broadly arranged, more effectively left to tell their own tale.

II.

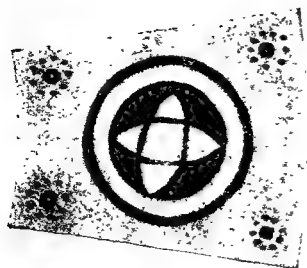
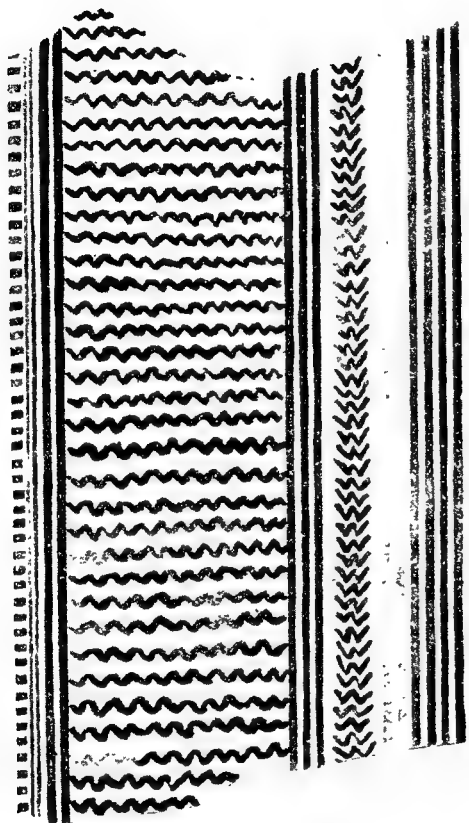
The small bowl here reproduced (Fig. 2) was acquired in Melos, and is now in the Ethnion Museum in Athens. The vase, which was found in numerous fragments, has been satisfactorily reconstructed so far as its form goes; but though the design is perfectly intelligible on inspection its original colour has in great part disappeared, the surface being now in a uniformly dark and greasy condition, as if from the application of oil varnish. It measures 11.3 cm. across the mouth, 65 cm. in its greatest circumference, and is 15 cm. in height. To this little bowl there seems to be no exact parallel in form and decoration.¹

In shape it is nearly spherical, but it has a thin flat lip pierced with holes as if for the attachment of a lid and a foot simply formed of a fillet of clay. As its base is decorated with a rosette it seems likely that the easily added foot was as it were an after thought, and that this type of vase was originally and primarily intended for suspension.

¹ A second bowl, also acquired by Mr. Cecil Smith at Melos, is practically identical in shape but shows a decorative scheme of swans upon the shoulder. This vase has a lid in the edge of which are holes corresponding to those

pierced in the rim of the bowl and thus showing their purpose. Other than this the nearest analogies to our vase seem to be the Ionic *deinoi* published by E. Pottier, *Bulletin de Correspondance hellénique*, 1893, p. 421, all

2



About 1 : 49

6

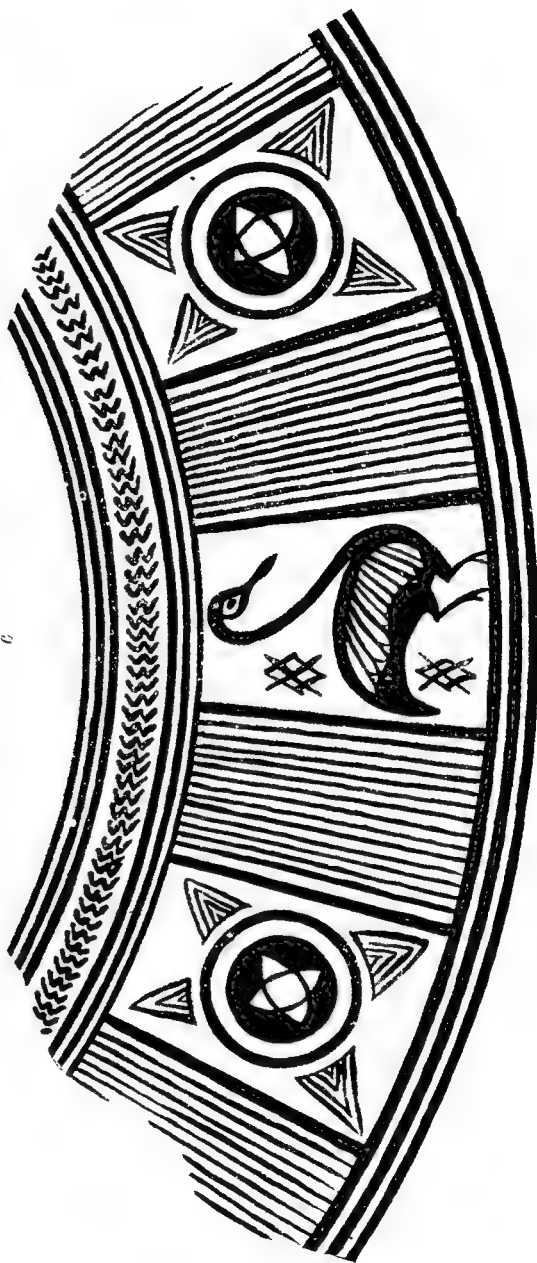


FIG. 3. -GEOMETRIC AMPHORA FROM THERA.

Turning to the decoration of its surface we are in a measure reminded of the patterning of the large Melian amphorae. Its basis is still the spiral and vincula, but the simple spiral forms of the larger vases are abandoned for a design of greater complexity, in which the upper portion is composed of inverted spirals, and the cross-hatching is further accentuated throughout. A further innovation¹ is the large band of black encircling the bowl at its greatest circumference and dividing the design into two equal parts. Slight differences in the preservation of its surface indicate that this band was once embellished with a purple stripe edged with white, a feature which appears on Rhodian amphorae. Foreign also to the decorative schemes of the Melian amphorae are the dotted surfaces contained in an outline seen in the fleur-de-lys additions to the opposed spirals in the main design, and in the carelessly executed rosette on the base. In the case of animal forms such dotted surfaces occur both on Rhodian and Boeotian vases, and also on the sarcophagi from Clazomenae.² But for the application of this technique to forms derived from natural growth we have an exact parallel in the field ornaments of an amphora³ of the later Dipylon style, and also in the same elements of a large bowl⁴ found at Thebes.

In its technique the bowl is more clearly reminiscent of the large amphorae than in its decoration, as it has precisely the same lemon-coloured slip with the design applied in uniform black pigment.⁵

III.

The Geometric amphora reproduced in Fig. 3*a* is 50 cm. in height, and measures 65.5 cm. round the neck, and 119 cm. round the body. It is of a hard red clay, covered originally with a thin polished slip of yellowish brown, the decoration being applied in a varnish paint of a darker brown. The colour has however been spoiled by subsequent varnishing.

The neck is low and cylindrical, the handles horizontal and inclined outward. The decoration is confined to the upper part of the vase, the lower half being covered with the brown varnish paint, except for two reserved bands. The decorative scheme is intelligible from the cut. The vertical surface of the projecting lip shows alternate squares of slip and glaze. Below this the neck and the upper part of the amphora are covered with an arrangement of vertical zigzags, horizontal lines, and sigma-shaped markings running in each case completely round the vase (Fig. 3*b*). Below this the space between the handles is divided on either side into three metope-like divisions by vertical lines. On the obverse the central square is filled by a primitive type of water fowl, those adjacent on either side have circles enclosing a quatrefoil rosette in the middle and triangular ornaments at the corners (Fig. 3*c*). The arrangement on the reverse is precisely similar, except that dotted rosettes take the place of the triangular ornaments in the corners of the exterior squares (Fig. 3*d*).

The amphora was in the possession of the historian George Finlay, and was included in the recent gift of his library to the British School at Athens. By some unexplained caprice, when it came into the possession of the School it had been ornamented with a frieze of red

of which, however, are without the foot. The Nequada vases published by the Egypt Exploration Fund afford a curious though, I suppose, an accidental parallel. One of these is in the British Museum, a little bowl numbered A 1679, in Case I, which contains vases mostly from primitive tombs in the Greek islands. It has no foot, and the holes for suspension are horizontal piercings in ears attached to the sides. It is completely covered with a decoration of thin and rather straggling spirals in red varnish paint on a buff ground. This

bowl was brought by Mr. Greville Chester from Sameinich in Upper Egypt.

¹ Unless the upper edge of the neck of the amphora published by Boehlan (cf. *supra* p. 68, footnote 3) presents the same feature.

² *Jahrbuch*, 1897, p. 195.

³ *Jahrbuch*, 1887, pl. 3.

⁴ *Id.* pl. 4.

⁵ If, as is possible, the vincula of the spirals on the bowl were originally purple, we have a further resemblance.

figures cut from some publication, and heavily coated with varnish. We are in no doubt as to its provenance, as a note in his diary expressly states that he acquired it in the island of Thera.

It seems likely that this island is the real provenance of the late Geometric class of vases¹ previously called Boeotian to which our amphora belongs. Two of them were certainly found in Boeotia, the other three are of uncertain origin; but since the publication of Dr. Wide's article the Freiherr Hiller von Gärtringen has given an account² of the discovery in the necropolis of Thera of two classes of Geometric vases, the second of which is identical in fabric and decoration with those enumerated by Dr. Wide, while the isolated amphora now published is further proof of the Thera origin of the whole class. A further argument for this change of name is supplied by the similarity of the class in question to the earlier class of Thera vases found on the same spot. Both groups have the same low horizontal handles, in both the decoration is confined to the neck and shoulder, and a front side of the vase is recognised, while decorative forms common to both classes are the Geometric water fowl and the circles enclosing rosettes.

But if these vases are to be assigned to the Thera potter, it seems probable that he had in these early days a market for his wares in Boeotia. Not only were two Thera amphorae there found, but there is good reason for supposing³ that the vertical zigzag on the neck, which occurs throughout the Thera class, is a characteristic of the Boeotian Geometric style.⁴

Another close parallel to this class of Thera ware is to be found in the well-known type of Geometric cylix,⁵ having the interior painted black (often with narrow purple bands) and the exterior divided on either side into three metope-like divisions, of which the central contains the familiar water fowl of Geometric art, while the others have as a rule diamonds of rudely hatched cross lines.

There are in the rendering of animal forms on this class of Thera vases two peculiarities of drawing, viz., the use of dotted surfaces to cover parts of the body, and of an unbroken line enclosing the shoulder. When the Rheneia finds, which contain a considerable amount of evidence on these points, are fully published, further light may be thrown on the correlation of these vases with other classes by the consideration of the locality and diffusion of these features. It may be a pure coincidence that the fine griffin-headed jug acquired by the British Museum from the Castellani collection and now called Aeginetan, was said to have come from Thera. But it is certainly remarkable that it has in common with the Thera amphorae not only these two peculiarities of animal drawing, but also the tripartite metopic division of the shoulder, and the lozenge pattern and the gulloche among its ornament forms.

JOHN H. BAKER-PENYOIRE.

¹ In the *Jahrbuch* for 1897, pp. 195-199, Dr. Wide gives a list of these. They are Nos. 895, 896 in the National Museum at Athens, of which he gives photographs: two vases, one in Leyden and one in Paris reproduced by Conze, *Zur Geschichte der Anfänge der griechischen Kunst*, Taf. XI. 1, 2: and the Stockholm vase, which was the subject of Wide's article, and of which he gives a reproduction on Pl. 8, 14.

² *Archäologischer Anzeiger*, to the *Jahrbuch* for 1897, p. 78.

³ Cf. J. Bohlau, *Jahrbuch*, 1888, p. 325.

⁴ It also occurs in the large Eretrian amphorae Nos. 1005, 1006, in the Ethn. Museum at Athens. Cf. M. Couve's article in the *Bulletin de Correspondance Hellénique*, 1893, p. 279.

⁵ *Annali*, 1877. Tav. d'Agg. CD. 5, 18.

THE ZAKRO SEALINGS.

[PLATES VI.—X.]

§ 1.—THE TYPES.

THE circumstances under which a find of impressed clay nodules was made in a Mycenaean house at Kato Zakro, in East Crete, in May 1901, are related in the *Annual of the British School at Athens* vii. p. 133. The nodules are of a fine clay baked, probably intentionally and not by the conflagration which destroyed the house, to varying shades of red. A great number are broken, but the more perfect, including many bearing two and three impressions, show a groove on one edge, about an eighth of an inch deep and a little more wide, scored with straight and oblique scratches. This is the impress of something cylindrical, to which the nodule was pressed while still wet. The appearance of the clay in the grooves shows that this object was not textile, and it may most reasonably be supposed to have been a reed, perhaps a papyrus stalk. The number of nodules is in all about 500.

Out of 144 varieties of type represented, the nodules bearing 137 were found in good enough preservation for their different faces to be cast in Candia and photographed for this paper. I group the types in the following catalogue by their more obvious affinities, not by their association on the nodules. The significance of the latter fact I will deal with in the following section. Several specimens were found of certain types, and as in some cases different specimens retained different parts of the impressions, I had a number of drawings made by Monsieur E. Gilliéron from the original nodules, most of which I add here as a supplement to the photographs of the casts (Plates VI.—X.). They are larger than the originals by one diameter. No one of the gems or rings, with which these nodules were originally impressed, has come to light.

A.—GENRE TYPES

Pl. VI. 1. (Fig. 1) *Cult Scene*¹ (Two Specimens).

A two-storied altar or shrine to left crowned with two sets of 'horns of consecration, and showing two pillars in its upper storey. Before it a standing male figure, with left

¹ Abbreviations used in this article:—

A.G. = *Antike Götterwelt*, vol. i. by A. Furtwängler

T.P.C. = *Mycenaean Two and Pillar Cult* by A. J. Evans, in *J.H.S.* xxi.

B.M. = *British Museum Gem Catalogue*.

P.C. = *Hist. de l'Art*, vol. vi by Perrot and

Chippiez

B.S.A. = *Annual of the British School at Athens*

P.P. = *Primitive Pictographs*, &c., by A. J. Evans, in *J.H.S.* xiv.

F.D. = *Further Discoveries*, &c., by A. J. Evans, in *J.H.S.* xvii

arm extended backwards, and indication of a waist-cloth. Midway a draped female figure suspended in air. Behind the male is a second 'altar,' apparently also two-storied, with 'horns of consecration' on the lower platform; and a lotus-like bloom on a stalk, issuing from the altar, droops over the horns. Pl. VI.

A similar 'altar' is figured in *A.G.* ii. 21, but with the horns shown inside (cf. also *T.P.C.* Figs. 53, 59); and the suspended figure is a feminine repetition of the descending gods shown both on a well-known Mycenae ring, and on the Knossian ring, published by Evans (*T.P.C.* Fig. 48). Plants issuing from 'altars' often occur (*T.P.C.* Figs. 48, 52, 53, 55, 56, 59), but a single bloom is new. See *T.P.C.* §§ 24-26 for as much explanation of this type of cult scene as can at present be given. I question, however, if the 'altars' are not rather houses or shrines, terraced up a hill-side, as the Zakro structures certainly were terraced; and if the significance of the type is not the descent of a beneficent divinity upon a newly-erected house or temple.



FIG. 1 (No. 1).

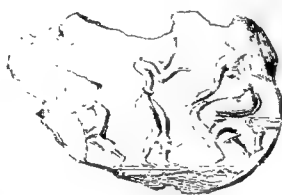


FIG. 2 (No. 3).



FIG. 3 (No. 4)

2. *Cult Scene?* (Two Specimens, one with No. 62, the other with No. 26, on the reverse of the nodule).

A female figure, draped in the 'Babylonian' petticoat, in the centre with left hand extended towards a pillar or tree. Behind her a male figure with right knee forward. On the other side of the 'tree' a male figure with right hand on breast. On Tree cult, see *T.P.C.* No very near parallel to this type is known.

3. (Fig. 2) *Cult Scene?* (Single Specimen).

Woman draped in attitude of adoration (?) before a gigantic woman seated on a throne. To left a third female figure apparently in act of departure. For the seated female (goddess) cf. *T.P.C.* Fig. 51, and for the whole scene Fig. 64. This impression is a reversed replica of an unpublished Knossian sealing, found by Mr. Evans.

4. (Fig. 3) (Three Specimens.)

A female in flounced bell-skirt, supporting a goat whose head falls back over her right shoulder. Before her appears either the edge of a structure built of stone courses, of which every third one projects, or a bank of foliage conventionally treated. These impressions might almost have been made from the Vaphio carnelian figured in *A.G.*, Plate ii. 25.

5. (Fig. 4) (Single Specimen.)

Demon with bestial head and human limbs, in act of adoration before a female in flounced skirt. The scene is parallel in its arrangement to that on a Knossian sealing published by Mr. Evans in *B.S.A.* vii. p. 18, Fig. 7a. In the case of my own type it is impossible to be certain of the character of the monster's head. The tail may be bovine, but also may be canine, and certainly the monster is nearly related to the adoring dog-apes of Egypt.

6. (Fig. 5) (Single Specimen.)

Two draped figures, both apparently to right. Between them a *labrys* suspended in air. Cf. remarks of Evans in *B.S.A.* vii. p. 54. Before the right-hand figure is an object

Pl. VI. such as that which Furtwangler calls a *Fischreue* ('lobster-pot') in explaining a Heraean gem (*A.G.* ii. 42). Compare No. 47 below.

The form of the *labrys* is that rendered familiar by the famous gold signet from Mycenae (*e.g.* in *T.P.C.* Fig. 4). But the form of the dress in our type is new, and will be seen on the two succeeding types more clearly. It seems to be a kind of knickerbocker gathered in below the knee and very full in the thigh, or else an apron-like prolongation of the bodice falling before and behind, but cut up at the sides.



FIG. 4 (No. 5).

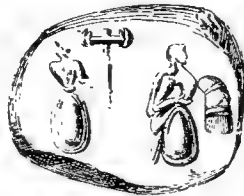


FIG. 5 (No. 6).

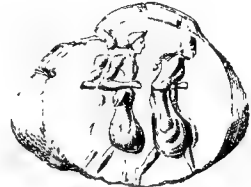


FIG. 6 (No. 8).

7. (Single Specimen.)

Two figures in the same dress as in No. 6 in animated converse. That on the right carries a spear (?)

8. (Fig. 6) (Ten Specimens.)

Three figures moving right with arms held as in running. Same dress as in 6 and 7. The leading figure has a long lock of hair pendent on the back, and all seem to be female.

9. (Single Specimen.)

Two female figures, and between them a suspended object like a star or the lower part of an icon, which the left-hand figure seems to be adoring. She wears the usual long bell-skirt. The other has a much shorter skirt, possibly identical with the dress seen in Nos. 6-8, and her attitude suggests a ritual dance. Behind her a suggestion of a plant (?)

10. (Thirty Specimens, with No. 97.)

A female figure in long bell-skirt with hands on breast, opposed to a figure with cap and long mantle (?) from neck to feet.

11. (Single Specimen.)

Semi-nude male figure before a second advancing energetically to left and draped in a robe girdled at the waist and depending in folds to the knees. Behind this figure a suggestion of a plant (?)

12. (Four Specimens, with No. 75.)

Scene of combat. A nude warrior, striding over a second lying supine with head to left, receives with levelled spear a third who rushes at him from the right.

These scenes of combat are common types, cf. *B.M.* No. 73, and the Mycenae ring P. C., Fig. 421.



FIG. 7 (No. 15).

13. (Single Specimen, with No. 87.)

Scene of combat almost identical with No. 12, but found with a different reverse type and showing slight variation: *e.g.* the right-hand warrior is larger, in proportion to the others, than in No. 12.

14. (Single Specimen.)

A broken-up type in the last stage of degradation, placed here because it may possibly be derived from a combat-scene.

15. (Fig. 7) (Two Specimens, one with Nos. 51, 37, the other with Nos. 135, 59.)

Pl. VI.

Nude man apparently holding a kid in each hand, towards which two nanny-goats stretch their heads.

16. (Five Specimens, none in good condition).

Two series of squatting figures, one above the other and divided by a line. An exact replica of a Knossian sealing, not yet published, but described by Mr. Evans in *B.S.A.* vii. p. 102.

B.—MONSTERS AND DERIVATIVE TYPES.

17. (Eight Specimens, with No. 127.)

Monster with horned-bull head and pronounced bovine ears and tail, but apparently human trunk, arms, and legs, seated to right with left leg crossed upon right knee, and hands extended. Unquestionably a Minotaur type, but a new variety. (*B.S.A.* vii. Fig. 45.)

18. (Four Specimens, with No. 83.)

An almost identical Minotaur seated to left with gaping mouth. The fore-limbs are shown to be human arms by their upward curve. (*B.S.A.* vii. Fig. 45).

19. (Single Specimen, much rubbed, with Nos. 131, 51).

Apparently another Minotaur seated to right, but being more rudely engraved, the limbs are confused. They appear however to be certainly human.

20. (Fig. 8) (Single Specimen, with Nos. 86 and 98).

Full-length 'Eagle-lady,' (of a type cited by Evans *J.H.S.* xvii. p. 370 as occurring on an unpublished gem in his collection, which is however of much ruder workman-ship), winged and skirted, with trousered legs emergent from the flounces. Compare a gold ornament from the third shaft-grave at Mycenae (Schliem. Fig. 273). Above, a suggestion of cloud, rock, or foliage. Compare for this *inter alia* the Vaphio goblets.

21. (Seventeen Specimens, with Nos. 61 and 28).

Derivative type of 'Eagle-lady.' The trousered legs survive without detail or realistic form. The breasts have shrunk away between the wings, and the head has become aniconic—a mere cap, such as appears on a Vaphio gem (*Eph. Arch.* 1889, pl. 10, No. 37) and is familiar on Mycenaean ivories (e.g. P. C. Fig. 389). A Cretan carnelian in the British Museum (Cat. 78) presents a similar cap, doing duty for a head.

22. (Three Specimens, with Nos. 56 and 63).

The last type broken up into meaningless curves and lines.



FIG. 8 (No. 20).

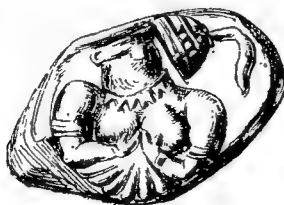


FIG. 9 (No. 24).



FIG. 10 (No. 25).

23. (Thirteen Specimens, with No. 52).

A variant of the 'Eagle-lady': below her double row of breasts is a fan-tail, identical with the vulture tail in Egyptian representations.

24. (Fig. 9) (Seven Specimens, 5 with Nos. 60, 112; 2 with Nos. 112, 105).

Similar type. A female bust with armlets, bracelets, and necklace, and hands on the

Pl. VI. breasts. Below the breasts a fan-tail. The head is entirely featureless, and seems to be a reminiscence of some aniconic form. The curious object, like a plumed cap, which depends from the head on the right, may be compared with the cap in No. 21 and in the two types next to come.

25. (Fig. 10) (Six Specimens, with Nos. 53 and 45.)

A variant which partly follows 23, the head being now completely supplanted by the cap. In the matter of wings it follows No. 20.

26. (Single Specimen, with No. 2.)

A derived winged type, showing a perversion of the head similar to that in No. 24.

7. Single Specimen, with No. 76.)

A variant of the 'Eagle-lady' type, with bird-head and nothing human, but the strongly marked breasts; fan-tail instead of human termination

28. (Seventeen Specimens, with Nos. 21 and 61.)

Derived from 26. The head has become assimilated to the fan-tail below. The breasts are gradually drooping.

Pl. VII. 29. (Single Specimen, with No. 85.)

Practically identical with No. 28, but the work is rather coarser, and the breasts are slightly more pendulous.

30. (Three Specimens, with Nos. 67 and 69.)

A distant derivative of the foregoing, the breasts having survived as a double bow-shaped coil.

31. (Fig. 11) (Two Specimens, both showing traces of a second type on the reverse, now indistinguishable.)

The same bow-shaped coil as in No. 30, but more elaborate, and surmounting a winged body, not unlike two caps (cf. Nos. 24, 25) placed one on the other. Below, a rope pattern, and at the sides conventional lotus blooms of a kind familiar in Mycenae moulded gold work (cf. Schliem. *Myc.* Fig. 162). The whole scheme recalls most forcibly the Vaphio gem, representing a horned cap, published by Tsountas in *Eph. Arch.* 1889, Plate 10, No. 37.



FIG. 11 (No. 31).



FIG. 12 (No. 34).



FIG. 13 (No. 35).

32. (Single Specimen, much defaced, with No. 35.)

As far as it can be made out, this type is the 'Eagle-lady' broken up. A reminiscence of the flounced skirt and legs remains: the trunk has become a pillar between two protuberances, which were the breasts: the wings are fast disappearing, and the head is probably gone.

33. Ten Specimens, with Nos. 132 and 90.)

A possible derivative of No. 25, or an independent variation, or even a naturalistic effort to represent a bird displayed.

34. (Fig. 12) (Four Specimens.)

Monster with a bearded goat's head, eagle wings and human trunk and legs, the latter draped in drawers, supported by a waist-belt.

35. (Fig. 13) (Single Specimen, much rubbed, with No. 32.)
A type similar to No. 31, but apparently ending in the female skirt, like No. 20.
36. (Fifteen Specimens, with No. 64.)
The same type as in No. 31. In all probability (the head is broken in all the impressions) turned to left, and smaller.
37. (Single Specimen, with No. 15 and 54.)
Variant of the winged Man-goat type in more vigorous action to right. The head seems to be that of a ram with curling horns, and ears well marked. The legs appear to be fully draped, and there is a tail.
38. (Single Specimen, with Nos. 65 and 68.)
Practically the same type as 34, but with large breasts and wings both folded back. The forward wing of 34 seems to survive here in the two lines projecting from the breast. The off-leg is clearly shown in profile behind the near one.
39. (Eight Specimens, with No. 43.)
The same type, still further broken up, the breast becoming detached, and the forward wing surviving in a single line.
40. (Single Specimen, with No. 50.)
Pegasus or Sea-horse—uncertain because the hind-quarters are indistinguishable.
41. (Two Specimens.)
Winged Sphinx to left.
42. (Single Specimen.)
Winged Sphinx to right.
43. (Eight Specimens, with No. 39.)
Bull-headed monster with eagle wings and human female trunk, hind-quarters spread and fan-tail from the anus. A fantastic Minotaur type of singularly fine execution (v. *B.S.A.* vii. Fig. 45).
44. (Thirteen Specimens, with Nos. 48 and 78.)
The same spread human hind-quarters with fan-tail as in No. 43, but surmounted by a suggestion of a human face with hair on end; a degradation of type No. 78 (?), with which it is associated on the sealings.
45. (Six Specimens, with Nos. 25 and 53.)
Same hind-quarters, but lotus bloom above.
46. (Single Specimen, with indistinguishable reverse, No. 142.)
Same hind-quarters, become wholly detached. Above the lotus survives an ill-executed ox-head, on either side of which something like wings seems to be indicated. This type should be related also to Nos. 54 and following and 81 and following, and is evidently mixed with them.
47. (Single Specimen.)
This defaced type is possibly a degraded metamorphosis of the preceding, the crested ox-head having taken the likeness of a four-fingered gauntlet or a flaming torch. At each side are traces of what look like similar 'gauntlets' or 'torches,' inverted. Compare No. 6 above and also a Cretan gem in *A.C.* iii. 7.
48. (Thirteen Specimens, with Nos. 44 and 78.)
A variant degradation of No. 44 with Maeander added above.
49. (Fig. 14) (Two Specimens, with No. 130.)
Double dog head, with single wing rising between.
50. (Single Specimen, much broken, with No. 40.)
A lion-headed monster, with human arms, one upraised, and a suggestion of a wing above the shoulder. Probably a degradation of some winged type, not here represented.

- Pl. VII. 51. (Fig. 15) (Two Specimens, one with Nos. 19 and 131, the other with Nos. 131 and 144.)
Two monsters with lion heads, and bird bodies, but apparently human arms. Compare their heads with those on a gem from a chamber tomb at Mycenae (*A.G.* iii. 16).



FIG. 14 (No. 49).



FIG. 15 (No. 51).

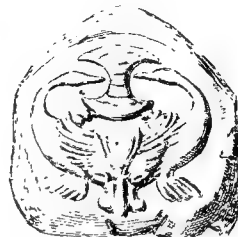


FIG. 16 (No. 57).

52. (Thirteen Specimens, with No. 23.)
Two birds heralically opposed, with a large lotus bloom between. The opposed birds in Schliem. *Myc.*, Fig. 480 supply a very close parallel.
53. (Six Specimens, with Nos. 25 and 45.)
The two birds degraded to a formal scheme, the bodies having disappeared and tails become exaggerated.
54. (One Specimen, with Nos. 15 and 37.)
The two bird heads, crested and magnified, but similarly posed. Below, a suggestion of something like a degraded lion-mask.
55. (Single Specimen, greatly defaced, with indistinguishable reverse, No. 141.)
The two birds degraded, and probably ending below in a complete lion-mask as in the succeeding type.
56. (Three Specimens, with Nos. 22 and 63.)
The two birds still further degraded, and tending to be wholly subordinated to the lion-mask.
- Pl. VIII. 57. (Fig. 16), 57 A. (Seventeen Specimens, with No. 73.)
Two impressions in different states of preservation from the same seal. A remarkable modification of the Bird-mask type. The lion-mask has become dominant; the birds' heads grow up out of its ears, and changing their direction, now oppose each other across a *labrys*, possibly developed out of the lotus bloom in No. 51, duplicated.
58. (Three Specimens, with Nos. 74 and 84.)
A variant degradation of the Bird-mask type, showing faint survival of the twin birds and lotus above the mask, and below it a pair of wings.
59. (Single Specimen, with Nos. 15 and 135.)
So far as this type can be made out, it shows the mask much degraded and becoming prolonged upwards; the indistinct outline below seems to represent the upper edge of the wings of the preceding type.
60. (Five Specimens, with Nos. 24 and 112.)
A derivative type. The birds survive in even less distinct form than in No. 64, but the lotus is intact. The wings have become curved horns from either side the muzzle. It is easy to see how, if turned upside down, this type would lead to the ox- or moufflon-masks of Nos. 81 and following.
61. (Seventeen Specimens, with Nos. 21 and 28.)
The foregoing type in a variant form, having the same original. The birds are stylized

and wingless, but retain their old direction, and the lotus bloom between them is degraded, not changed. The lion-mask though a good deal degraded, retains some features, *e.g.* the ears, in a realistic form. Though an independent variant and probably earlier, I place it after the foregoing, since this modification of the wing-horns prepares the way for the following types. Pl. VIII

62. (Single Specimen, with No. 2.)

Lion-mask of more realistic type retaining in two upward curving protuberances, and indistinctly in some form of crest, a reminiscence of the birds; and in the lower projections, a survival of the wings.

63. (Single Specimen, with Nos. 22 and 56.)

The same. The birds survive only in a looped crest, and perhaps in the upward curve of the upper pair of projections. The lower pair tends to disappear.

64. (Fifteen Specimens, with No. 36.)

Slight alteration of the foregoing, approximating to a fox-mask. Only the upper pair of projections survives.

65. (Single Specimen, with Nos. 38 and 68.)

Enlargement and slightly coarser form of the foregoing.

66. (Single Specimen, with reverse type identical with No. 33.)

A parallel degradation, going back to the original Bird-mask. The birds' heads remain as formless knobs on either side of a stylized lotus: their bodies have become two bow-shaped lines, instead of one as in No. 55: the mask is greatly degraded, approximating to its form in the types immediately preceding, and the muzzle projections are developing fantastic tips like the horns of the moullou in No. 83.

67. (Three Specimens, with Nos. 30 and 69.)

The lion-mask in a variant and more naturalistic form.

68. (Single Specimen, with Nos. 38 and 65.)

The same, with elongated forehead growing upwards, and surrounding hair becoming more pronounced.

69. (Three Specimens, with Nos. 38 and 67.)

The same. The forehead has grown upwards into a palm-like crest. Whiskers pronounced, and recalling the wing developments of preceding types.

70. (Two Specimens, with No. 77.)

The crest developed into a palm, and the mask almost degraded away.



FIG. 17 (No. 71).



FIG. 18 (No. 72).



FIG. 19 (No. 74).

71. (Fig. 17) (Twenty-eight Specimens, with No. 89.)

Elaborate variant modification of the same type, affected by reminiscences of other types. The mask much degraded, but retaining traces of whisker lines; the palm crest elongated till it resembles a lotus bloom. Butterfly wings added with star or flower

Pl. VIII. centres. This 'comma' or leaf-like type of wing with a round centre is familiar in Mycenaean work (cf. *e.g.* Schliemann *Myc.* Fig. 275). The projections on each side of the mask below look like degradations of the skirt-flounces and emergent draped legs of types 20-22.

72. (Single Specimen, with two indistinguishable types.)

Final degradation: the mask is gone; the drapery and legs survive only in a small horseshoe. The butterfly wings, with their centres, remain as the chief constituents of the type, and the palm-crest survives as a trefoil. Compare gold ornaments from the third Mycenae shaft-grave. (Schliem. *Myc.* Figs. 275, 293.)

73. (Fig. 18) (Seventeen Specimens, with Nos. 57, 57A.)

A curious, but fairly certain, derivative from the preceding. The spines of the butterfly wings remain, and the trefoil between them has developed into three objects suggestive of the leaves of a prickly pear or the ends of a cuttle's tentacles. The scalloping of the wings has been accentuated, and the projections broadened, till they approximate to axe-blades. The original mask survives as a mere stem.

74. (Fig. 19) (Three Specimens, with Nos. 58 and 84.)

Front view of female sphinx with cap and 'comma' butterfly wings.

75. (Four Specimens, with No. 12.)

Same type as foregoing, degraded.

76. (Fig. 20) (Single Specimen, with No. 27.)

A grotesque human bust with demoniacal features, set in a butterfly's (or bat's) wing: perhaps developed out of the star- or flower-centre of the 'comma' wings in the foregoing types.



FIG. 20 (No. 76).

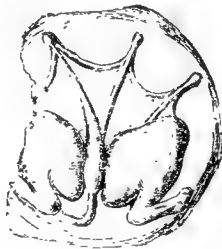


FIG. 21 (No. 77).



FIG. 22 (No. 78).

77. (Fig. 21) (Two Specimens, with No. 70.)

Apparently a squatting griffin-like monster, with butterfly or bat wings, seen *a tergo*. Hind-quarters, so seen, probably suggested the form in types 43-50.

78. (Fig. 22) (Thirteen Specimens, with Nos. 44 and 48.)

Monster with human head, wings covering all the body, and lion's legs. But for the legs the suggestion of a cherub is very strong.

79. (Two Specimens, both imperfect, with Nos. 93 and 111.)

A winged monster, similar to the last in having lion's legs, of which one only is seen. Head gone. At its feet crouches some animal of which only part of the hind-quarters appears on our specimens.

80. (Fig. 23) (Nine Specimens, with No. 134.)

A type which partly explains the two foregoing, being an evident degradation of two opposed lion-sphinxes, which had perhaps one head between them. The head survives as a loop, and the common body has been modified into a rudely-drawn *bucranium*.

81. (Fig. 24) (Two Specimens, with Nos. 82 and 108.)

Pl. VIII.

A new type of the same class as the preceding series, and probably a derivative from the same original Bird type. A moufflon- or ox-mask takes the place of the lion-mask. The wavy lines below the muzzle are probably derived from wings, as in Nos. 60 and following. Compare the style of this type and the two next in order with that of the Heraeum gem in *A.G.* Pl. ii, No. 42.

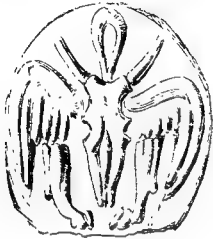


FIG. 23 (No. 80).

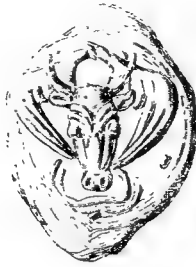


FIG. 24 (No. 81).



FIG. 25 (No. 83).

82. (Two Specimens, with Nos. 81 and 108.)

Same type much simplified: the wings are represented only by curves each side of the muzzle.

83. (Fig. 25) (Four Specimens, with No. 18.)

Fantastic variant of the same type. The birds are broken up into a maeander such as frequently appears on Mycenaean objects (cf. the bone roundels Schliem. *Mye.*, Figs. 128, 129). The horn tips are developed into bestial heads. Lines below the muzzle are simplified and assimilated to types 62 and following.

84. (Three Specimens, with Nos. 58 and 74.)

Pl. IX.

Same type with maeander and horns simplified.

85. (Single Specimen, much perished, with No. 29.)

Same type, varying in the upper part in some manner not now distinguishable.

86. (Single Specimen, with Nos. 20 and 98.)

Same type, but with wings, and a 'cap' precisely similar to that on a Vaphio gem (*Eph. Arch.* 1889, Pl. 10, No. 37).

87. (Single Specimen, with No. 13.)

Similar type in large, but whether winged or not below the muzzle, it is not now possible to say.

88. (Fifteen Specimens, with Nos. 90 and 132.)

An independent degradation of the Bird-mask type. The original birds are represented by the two up-curving lines above the mask, and their heads and the lotus have been confounded and come out as a four-spoked wheel. The wings of the birds and the wings or wavy lines below the muzzle have become double horns, with an abrupt upward curve. The mask is much degraded.

89. (Twenty-eight Specimens, with No. 71.)

A type showing certain analogies with the foregoing series *e.g.* lotus, and pattern below which seems to represent the last degradation of the lion- or moufflon-mask. The object below this again seem to have bird bodies but formless bestial heads.

90. (Twenty-five Specimens, with Nos. 33, 132 and 88.)

Possibly another and further reduction of the same type, preserving the lotus above. Compare, for a very close analogy, the ornament on a gold object found in the third Shaft Grave at Mycenae (Schliem. Fig. 303, and reversed, P. C., Fig. 547).

Pl. IX. 91. (Single Specimen.)

The foregoing type in the last stage of degradation (?).

92. (Fig. 26) (Twenty-one Specimens, with No. 129.)

Two seals of which I show one only. The other has the antlered head to right (No. 139). Obviously a derivative, showing relations to more than one preceding type. The raised human hands and the row of bulbous objects below the stag's head correspond closely to the arms and breasts of the 'Eagle-lady' type No. 23. The antler's outline recalls the 'coma' wings, and the head from which it springs has probably come into being, *contra naturam*, later than, and to explain, its growth.



FIG. 26 (No. 92).



FIG. 27 (No. 96).

93. (Two Specimens, with Nos. 79, 111.)

Four lion-masks, opposed.

94. (Single Specimen.)

Quatrefoil, placed here as a possible degradation of the foregoing type, but to be compared with gold-leaf ornaments from Mycenae (Schliem. Figs. 231, 286, 290).

95. (Single Specimen.)

An ox-head.

C.—NATURALISTIC TYPES.

96. (Fig. 27) (Single Specimen.)

A bull : traces in the field behind the head of a human figure (?). Probably a scene of *ταυροκαθάρσια*. From a gold ring!

97. (Thirty Specimens, with No. 10.)

Bull in course.

98. (Single Specimen, with Nos. 20 and 86.)

Same type as foregoing.

99. (Single Specimen.)

Bull to right in attitude of following a cow. A Vaphio gem (*A.G.* Plate II., No. 49) corresponds very closely and cf. the famous golden goblets from the same find.

100. (Three Specimens.)

Bull at the charge to right : on one specimen an object is seen over his quarters which suggests a female icon.

101. (Single Specimen.)

Bull or cow to right with head turned back. Compare a Vaphio carnelian (*A.G.* iii. 42).

102. (Single Specimen.)

A scene of the chase? Bull in flight to right, turning its head towards a lion or dog attacking its quarters. In front a man?

103. (Single Specimen.)

Bull to right, standing before a tree?

104. (Single Specimen, with No. 119.)

Combat of a lion and a bull on rocky ground.

105. (Two Specimens, with Nos. 24 and 112.)

Two lions in full course before a palm-tree. Rocky ground below. For their action, cf. S. Reinach, 'La Représentation du Galop' (*Rev. Arch.* 1901, p. 440 ff.). This sealing supplies a characteristic example of the free Mycenaean representation of the *galop volant*, less exaggerated than in the case of lions on the Mycenaean daggers.

106. (Single Specimen.)

A lion to right, turning his head. Compare, for the style, the gold ring found in the fourth shaft grave at Mycenae (*A.G.* ii. 8).

107. (Single Specimen.)

A lion to right as before.

108. (Two Specimens, with Nos. 81 and 82.)

A lion to right. The tuft of his tail shows over his back.

109. (Single Specimen.)

Lion to left, turning towards a spear which has transfixed him.

110. (Single Specimen.)

Combat of bull and lion? very like No. 104 reversed.

111. (Two Specimens, with Nos. 79, 93.)

Two lions heraldically posed to front.

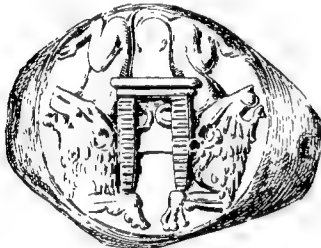


FIG. 28 (No. 112).

112. (Fig. 28) (Seven Specimens, with Nos. 24 and 60.) Pl. X.

A portal (= Gate-Shrine?), with lions reversed on either hand. The attitude of the animals is characteristic of Mycenaean art. Compare many gems, and such compositions as the Menidi ivory figured in P. and C., Fig. 408.

113. (Two Specimens, with No. 13.)

Lion head to left.

114. (Four Specimens.)

Lion springing on a goat.

115. (Single Specimen.)

Two goats.

116. (Single Specimen.)

Two goats.

117. (Four Specimens.)

Lion springing on a goat or moufflon

118. (Single Specimen.)

Two goats or moufflons.

119. (Single Specimen, with No. 104.)

Two goats.

120. (Single Specimen.)

Goat in course to left, turning his head. Compare, for the style, the flying stag on a Mycenaean ring (*A.G.* ii. 8).

121. (Single Specimen.)

Goat to right.

122. (Single Specimen.)

Goat to left tethered or speared?

- Pl X 123. (Single Specimen.)
Goat in course to right.
124. (Single Specimen.)
Goat to left, turning towards spear, or tether-rope !
125. (Single Specimen.)
Goat standing to right.
126. (Single Specimen.)
Goat to left.
127. (Eight Specimens, with No. 17.)
Hog to right. Compare a Vaphio gem, published in *Eph. Arch.* 1889, Pl X., No. 15, and the Peloponnesian gem at Berlin, published in *A.G.* ii. 12.
128. (Single Specimen.)
Two cocks facing across an altar.
129. (Twenty-one Specimens, with No. 92.)
Bird displayed. The attitude is not natural, and the eyes at the roots of the wings betray a survival of something, perhaps the breasts of a mixed type.

D.—MISCELLANEOUS TYPES.

130. (Fig. 29) (Two Specimens, with No. 49.)
Five towers built of ashlar masonry on a hill : three shields of the usual Mycenaean type below.

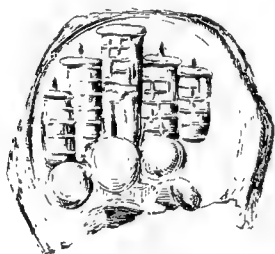


FIG. 29 (No. 130).



FIG. 30 (No. 131).

131. (Fig. 30) (Two Specimens, one with Nos. 19 and 51, the other with Nos. 51 and 144.)
The façade of a shrine ? divided into panels or compartments (cf. *T.P.C.* Figs. 65 and 66) with two shields below. Unfortunately both specimens are in such bad condition that details of the type remain very doubtful ; but something like the 'horns of consecration' appears in an upper storey to left, and at the sides are possible traces of human figures.
These two last types show obvious use of the shield as a symbol, probably of divine protection extended to the buildings associated with them. No. 130 would appear to represent a whole city, or at least the castle of a chief, No. 131 a particular shrine.
132. (Twenty-five Specimens, ten with Nos. 33 and 90, and fifteen with Nos. 88 and 90.)
Three rosettes ? or *echini* ? with conventionalized lotus blooms between. No doubt a derived type like those associated on the same sealings.
133. (Single Specimen.)
A simplified 'Labyrinth' scheme.
134. (Nine Specimens, with No. 80.)
Pattern directly developed from the spiral on such an Egyptian scarab as is figured in

Petrie, *Egyptian Decorative Art*, Fig. 31 (See Fig. 31). Compare also another, and probably later, form of the same pattern on a Zakro pierced 'weight,' published in *B.S.A.* vii., Fig. 40. 4.



FIG. 31.

135. (Single Specimen, with Nos. 15 and 59.)

A further development of the spiral into a coil.

136. (Single Specimen.)

Group of pictographs. Another impression shows the group reversed, with the vase symbol on the right (No. 140).

137. (Single Specimen.)

Group of pictographs.

E.—TYPES NOT ILLUSTRATED.

Certain reversals of types illustrated have been mentioned, but as the sealings on which these appeared were distinct, they had better be catalogued separately :—

138. Winged human figure to right ; cf. No. 36.

139. Antlered stag's head to right ; cf. No. 92.

140. Group of pictographs ; cf. No. 136.

Other types too fragmentary for illustration are :—

141. Confused derivative type : the beak of an eagle is the only thing clearly distinguishable ; reverse of No. 55.

142. Part of a draped human leg ; reverse of No. 46.

143. Row of broad arrow-heads down the axis of the gem.

144. An indistinguishable type, with Nos. 51 and 131.

I add here (Fig. 32) a copy of an inscription traced with a fine point on a hollow disc made of the same clay as the sealings, and found with them. The legend is in the Knossian linear script. On the rim of the disc appear two faint impressions of a seal-type (two goats). Cf. *B.S.A.* vii. p. 133.

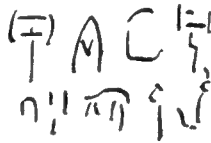


FIG. 32.

§ 2.—REMARKS ON THE TYPES.

(a) *Their Period.*

Analogies which certain of these types present to products of Mycenaean art, discovered elsewhere in the Aegean area, have been indicated in the foregoing catalogue. I will resume those which most clearly place Zakro types in relation to other finds whose period has been determined with approximate precision.

Correspondences with *Vaphio* are the most common here, as at Knossos.

Types 4, 31, and 99 might well be by the same hands as the Vaphio gems quoted *ad loc.*; and with No. 31, types 21, 24, 25, and 86, present very close analogies. Among identities in style the hog of No. 127, the bull of No. 101, and the lions of Nos. 108, 109 may be especially remarked. To the *Shaft-grave* objects, found at Mycenae, the Zakro types, Nos. 71, 72, 94, 106 and 120, stand in intimate relation. Coincidence with *Knossos* finds is closest in Nos. 3 and 16.

These correspondences have a much wider significance if it be conceded that different impressions on a single nodule were made at virtually the same moment. It is hardly likely that the clay could have been softened afresh to receive second and third impressions, without impairing the distinctness of the first. If the baking, which these sealings have all undergone, was intentional, we should have double proof that the stamps were made at one time. Further, if not so certain, it is at least highly probable, that the twice and thrice stamped nodules were impressed each by a single two or three faced seal, such as are commonly found in East Crete; and in that case the original engraving of associated types may be assumed to have been contemporaneous.

Thus the *Eagle-lady* types are brought into relation with Vaphio through the association of No. 28 with No. 21, and of No. 20 with No. 86. The *Bird-Mask* types come into the same group through the association of No. 60 with No. 24, No. 61 with No. 21, No. 53 with No. 25, and Nos. 81, 82 with No. 108. The *Hindquarter* type, in any case obviously related to the *Eagle-lady* types, is brought in directly by No. 25. The best of the *Minotaur*s (No. 17) is associated with No. 127. Association with No. 71 puts type No. 89 into relation with the Mycenae *Shaft-graves*, and shows that, though derivative, it cannot be far removed from its original, at least in time.

A careful examination of the remaining types reveals general homogeneity of style. There is no type which from this point of view must be placed necessarily either distinctly earlier or distinctly later than those just enumerated. Even such degraded types as Nos. 14 and 91 have a parallel at Vaphio (*Eph. Arch.* 1889, Pl. X., No. 17).

The period of the Mycenaean *Shaft-graves*, of the Vaphio burial, and of the acme of Mycenaean *Knossos*, is broadly the period of these Zakro gems, as determined by their own character. In the case of such objects as signets, often preserved in use for centuries, it is best to use internal evidence only. In this Zakro case the age of the gems would not necessarily follow from that of the pottery or bronze found near the sealings, nor on the other hand, can the age of the house, in which they were found, be determined safely from the period of the gems.

(b) *Origin and Reason of the Monster Types.*

The types in the foregoing catalogue might have been assorted more broadly into two classes, according as they may reasonably be held to have been

Fantastic or Realistic in intention. The first class would have comprised just the 78 types of our class *B*. But to have adopted that division at the outset would have been to beg several questions, *e.g.* the non-religious character of the Monster types (for no cult-type can be properly called Fantastic), and the religious character of certain genre scenes.

The main object of the catalogue is to show that the vast majority of types in class *B* are of purely local derivation, being variations of a very few types. It is a fact to be noted, before we proceed, that these variant types, which seem to have been obtained by the degradation or breaking up of others, must have been engraved so nearly contemporaneously with their originals that modification through unconscious action of the artist, or his want of understanding of the model is very difficult to credit. Not only is the general style throughout, as has been said, homogeneous, but in certain cases, *e.g.* Nos. 79, 44 and Nos. 67, 69, we find actually on the same nodule types, which under ordinary circumstances we should judge to stand to one another as original and derivative, divided by a considerable interval of time. The obvious and attractive analogy of Celtic coin types cannot therefore be applied to these sealings, almost all made in one place and at one time. It seems most probable that we have here an instance of modification made consciously and with full understanding in order to vary signet-impressions, that might otherwise have easily been counterfeited or confused.

A small number of independent Monster types, however, remains. Can anything be determined as to the origin and reason of these? The fondness of Mycenaean artists for representing Monsters is well known. Their civilisation evidently was in that stage, well expressed by Robertson Smith (*Religion of the Semites* p. 87), speaking of the Mesopotamians. 'In the region of plastic art, the absence of any sharp line of distinction between gods and men on the one hand and the lower creation on the other is displayed in the predilection for fantastic monsters half human, half bestial.' In the case of these Zakro types, however, few will maintain that the fantastic forms have anything to do with cult. We seem to be looking at the product of a yet further stage of art, which has passed from monsters with a meaning to monsters that are pure fancy. The single doubtful class among the Zakro monster types is that of the 'Minotaurs' (Nos. 17-19), which it is hard to suppose were independent of a cult probably existent contemporaneously at Knossos. They are, however, not very like any Bull-man types hitherto known in Aegean art.

If these Zakro types do not represent fantastic gods, still less do they seem to represent priests or votaries of a theriomorphic worship. Mr. A. B. Cook's ably supported theory, set forth in the 14th volume of this *Journal*, has not carried conviction to those best acquainted with Egyptian or Asiatic monstrous forms: and the balance of present opinion inclines decidedly towards such a theory as Winter's,¹ which sees in modification of foreign types, as *e.g.* the Egyptian hippopotamus-goddess, the origin of the strange forms

¹ *Jahrbuch*, 1890, p. 108.

which Mycenaean artists would probably not have been themselves able to explain. The credit accorded to this theory will be greatly increased by a shell-relief which was one of the most interesting discoveries made last year at Phaestos. By the great kindness of Professor Halbherr I am permitted to reproduce it here (Fig. 33). A glance is enough to assure anyone familiar with Egyptian art that these figures are first cousins of those Nilotic divinities, whose one arm is raised in exactly this pose, while the other, pendent, holds the *ankh*.

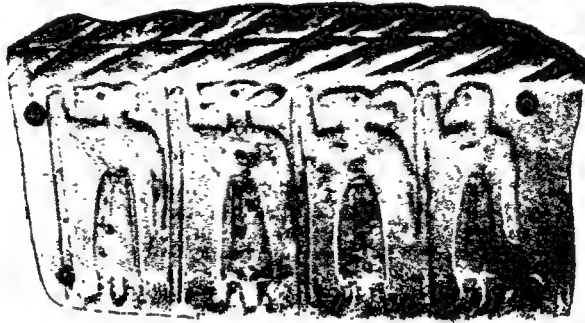


FIG. 33.

If we are to trace the parentage of these Zakro monsters it is in the direction of Egypt that we must look. Among the types in the other classes of our catalogue there are at least two striking parallels to Egyptian art, namely the adoring monster of No. 5, and the spiral pattern of No. 134. But the cousinship of our monsters with Egyptian art, though clear, is not very close. Nearly all the Zakro types are winged, whereas winged monsters are not conspicuously characteristic of Egypt. The Sphinx of the Nile is wingless till a late period, and remains commonly so to the end. The human-headed hawk, and winged goddesses, like Maat, have little analogy with the Mycenaean forms. On the other hand, in Mesopotamia winged monsters, as common art-types, belong to a late period, later indeed than we are led to ascribe to the Zakro types by their obvious analogies.

This is, however, only to say that the Zakro types were not taken *bodily* from any alien art; but a relationship may still be traced in details. We look to their most characteristic feature, the wings. There are four forms of wing represented. (1) The eagle or hawk wing with long terminal quills. This appears in more than 75 per cent. of the winged types. (2) The form only slightly modified from No. 1 which is seen in type No. 58 only, and anticipates the pinions of Hermes' *πτερόεντα πέδιλα*. (3) The upcurving almost spiral wing between the dog's heads in type No. 49. (4) The scalloped butterfly or bat wing.

It is a notable negative fact in regard to 99 per cent. of these forms, that there is no trace of the *scarabaeus* wing, which has influenced so largely Egyptian and, by derivation, Mesopotamian wings. The beetle wing-case, sur-

vivals of which appear both on the Assyrian bulls and the eagle-headed demons of Assyria, has left no sign of itself on these Mycenaean wings. The single exception is the stylized form No. 3, whose curve is that to which Phoenician and later Greek types have accustomed us; it is probably derived from the upcurved wing often seen on Egyptian scarab representations, and sometimes in those of the hawk. Even were there no difficulty of date, it could not be maintained reasonably that the free and naturalistic bird-wings of the Zakro types were derived from the highly stylized and composite Mesopotamian wing-forms, themselves almost undoubtedly of Egyptian derivation. In Egypt alone the prevailing Zakro form occurs (with similar type of fan-tail) in representations of the vulture (cf. Perrot and Chipiez i. Fig. 408). The Mycenaean artists have, however, with the true artistic instinct that we have learned was theirs, referred the counterfeit to the living model and produced a more realistic representation, which stands to the decorative Egyptian forms as the "practicable" wings of the fifth century Greek art stand to the "impracticable" wings of the Archaic period.

The occurrence of so many novel winged types in Mycenaean art will raise a question as to a possible relation between them and the winged types of archaic Greek art. Among the objects found by Schliemann in the shaft-graves at Mycenae were two gold ornaments representing winged monsters, a griffin and a sphinx (*Myc.* Figs. 272, 277); but these were easily relegated to the category of eastern importations, and did not disturb Langbehn in his contention that winged types belong to a late and fully developed stage of the Greek genius (*Flügelgestalten der ältesten griechischen Kunst* § 3).¹ The sphinx has reappeared on ivories, *e.g.* those of Spata, and the griffin on gems; but other winged types have remained so rare that, until this unexpected discovery of sealings was made at Zakro, no question of relation to archaic Greek art had been raised. There is certainly a *prima facie* reasonableness in supposing that Greek winged types were derived rather from those previously existing in the same area than from alien and distant schools of art; and in fact two Zakro types very closely anticipate later Greek types. The one is No. 58, very suggestive of the Hermes pinions; the other is No. 40, which may be compared alike with the early Pegasus on Corinthian coin-types, or the sea-horse on those of Lampsacus. The wing-form most commonly seen on the sphinxes and other types in archaic Greek art is represented among the Zakro types only by No. 49; but the common Zakro form is found often enough on seventh and sixth century objects; for instance in the Nike type on coins of Cyzicus, in Siren types on Corinthian and Rhodian vases, and the Typhoeus of the Vulci vase in Munich.² This form easily passes out of, or into, the upcurved spiral form, as may be seen by looking at the series of griffins on early coins of Teos. That fifth century wings should approach nearer to the Zakro wings than do the more archaic ones is to be expected; for the same artistic instinct of naturalism had been at work in Greek art since its renaissance, as in Mycenaean art.

D. G. HOGARTH.

¹ *c.* especially p. 54.

² Gerhard, *Auserles. Vasenbilder* III. 237.

FIRST REPORT OF A JOURNEY IN PISIDIA, LYCAONIA, AND PAMPHYLIA.

PART I.

As the task of publishing the immediate results of this journey has been entrusted to me, my first duty is to acknowledge the many obligations under which Professor W. M. Ramsay has placed me. Neither my companion Mr. G. A. Wathen of St. Peter's College, Cambridge, nor I, had had previous experience in this form of research, and we were fortunate in beginning the study of Asia Minor under his auspices. A large proportion of the materials here given was collected by him alone; and it is no exaggeration to say that without him we could have accomplished practically nothing, even if we had made the attempt. As I am increasingly conscious that the period of noviciate, on which I then entered, did not end with the journey, I am glad to think that my obligations to him extend to the time of the preparation of this Report. The same reason also makes me glad to know that Professor Ramsay is himself working these results into their place in the General History and Geography of Asia Minor. In this gladness all those interested in such studies will share.

My next duty is to thank all those who, in various ways, helped us to carry out the objects we had in view. On the one hand, we are especially indebted to the British Ambassador at Constantinople and to the Turkish Governor of the Vilayet of Konia; on the other, the funds at our disposal were largely increased, not only by the gifts of friends, but by contributions from the Managers of the Craven Fund, Cambridge, and the Worshipful Company of Mercers, London.

Professor and Mrs. Ramsay, after nine weeks spent in Asia and Phrygia, reached Konia on May 29, 1901; Mr. Wathen and I reached it on the 13th of June. We left Konia on the 13th of July. As our departure was hastened by the extreme heat, it may be well to note that travelling is possible in the table land from the middle or end of April to the end of October, or even the middle of November. June, with the last days of May and the early days of July, is the best time. In May thunderstorms are frequent, and in July the weather tends to become too hot. In a country with no roads to speak of, a thunderstorm is a serious hindrance to exploration. We hired a house in Konia, and made it our head-quarters for the whole of our stay; thence we made excursions to those localities which we wished to explore. The intervals between the excursions we spent either in making arrangements for our next journey, or in copying inscriptions in or close to Konia. We found this plan added considerably to

our comfort, and thereby to our efficiency. We also found that continued residence in one place drew attention to our work, and that the longer we remained in a place the greater became our chance of hearing tidings of sites and inscriptions, either on the spot or at a distance. As in a less degree this was true also of Khatyn-Serai, where we stayed four days, it would probably answer to establish head-quarters of a more temporary kind in such localities as promised good results, but are not suitable for a very long stay. I may add also that, within certain limits, a large party has distinct advantages: besides bringing more eyes and hands and ears to the work, it has from its mere numbers an appearance of greater importance, and thus secures better treatment and results.

A.—BEY-SHEHER EXCURSION.

OUR first joint excursion was to the district east and south-east of Bey-Sheher Lake, where we hoped to discover some evidence which might help to fix the boundaries of (Byzantine) Pisidia, Lycaonia, and Pamphylia.¹

The first day was occupied in the journey to Kizil-Euren; we examined the ruined Khans we passed, but they produced no inscriptions.

Kizil-Euren (Μισθρα?)

On the second day we were more fortunate. Kizil-Euren stands on the side of a hill, just where the pass from Konia begins to widen out and to form the small triangular-shaped plain which lies west of Kizil-Euren, between it and the Bagharzik Deré. The arabah-route from Kizil-Euren goes nearly due west: it passes close to two ruined Khans (one is marked in Sterrett's map), and crosses the entrance of a small valley which goes away to the north: it then skirts the foot of the mountain on which stands the old castle, Assar-Kalesi, and enters the pass which leads through the mountains to Yonuslar.²

¹ Part I will contain the inscriptions collected during this excursion (A, pp. 95-114). It will also contain the inscriptions from Konia Museum (B, pp. 115-118) and selected inscriptions from Konia and its immediate neighbourhood (B, pp. 119-125). With the rest of such inscriptions, and with those kindly handed over to us by Dr. Diamantides, I hope to deal in Part II., which will also contain inscriptions from the district East of Konia, that is to say, from Zazadin-Khan (Πρώτη Νομή), Yaghli Baiyat (Σάουαρπα) and their neighbourhood. Part III. will contain the inscriptions collected from the Lycaonian plain to the South of Konia; the chief places we visited being Khatyn-Serai (Δύστροπα), Dorla (Νέα Ίσαρπα), Kara-Eyük, Gudelissin and Seidi-Khan.

For A, the following itinerary may serve the purpose of an index.

June 18th, to Kizil-Euren (p. 95).
 „ 19th, to Yonuslar (p. 100.)
 „ 20th, to Selki-Serai (p. 105), *via* Tehukur-Aghyl (p. 101) and Seviudjik (p. 104).
 „ 21st, to Kirili-Kassaba (p. 106), *via* Kiosk (p. 106).
 „ 22nd, to Geurunmez (p. 108), *via* Khiak-Dede (p. 108) and Tchaush.
 „ 23rd, to Bey-Sheher (p. 108).
 „ 24th, to Fassiler (p. 112), *via* Kara-Assar (p. 110) and back to Kara-Assar.
 „ 25th, to Davghana (p. 113), *via* Bamdir (p. 113) and Tchonia.
 „ 26th, to Konia, *via* Yonuslar.

² The distance from Kizil-Euren to the entrance of the pass along this, the northern boundary of the plain, is about four miles. About three

No. 1.—On the right of the porch of the Chapel. W.M.R., H.S.C.

| | | |
|----|-------------------|---------------------------|
| | +ΟΥΤΟCΟΝΑΟCΟΠΑ | +οὗτος ὁ ναὸς ὁ πά- |
| | ΝCΕΠΤΟCΚΕΠΑΝCΕΒ | νσεπτος κὲ πανσεβ- |
| | ΙCΜΙΟCΕCΤΙΝΤΙCΠΑΝ | ύ]σμός ἐστιν τῆς παν- |
| | ΥΜΝΙΤΟΥ'Κ ΠΑΝΔΧΙΑ | υμνίου κ[ἐ] παναχ[ρ]ά[ν]- |
| 5 | ΤΟΥΚΠΑΝΜ,ΚΑΡ | του κ[ἐ] πανμ[α]καρ- |
| | ΙCΤΟΥΚΕΠΑΝΕΝΔΟ | ίστου κὲ πανενδό- |
| | ΞΟΥΚC ΛΟΦΟΤΟΥΚ | ξου κ[ἐ]] κ- |
| | . ΜΟCΚ.ΠΑΝ | ἐ παναμώ]μο[ν] κ[ἐ] παν- |
| | Ν ΠΑΝΔΓΙ | ημέρου (') κ[ἐ] παναγί[a- |
| 10 | C | ς [κὲ |
| | ΔCΔ//CΠΥΝΙCΙΜΟΝ | ας δ[ε]σπύνης ἱμῶν |
| | ΘΕ ΚC ΠΑΡ | θε[οτό]κο[ν] ἀειπαρ- |
| | Ο ΜΑ | θ[ένου] Μα- |
| | Ρ.ΓΟΑΥ ΕΝ | ρ[ί]ας |
| 15 | Κ ΕCΟ | |
| | Μ C | |
| | . | |
| | . | |
| | ΟC | |
| 20 | .Ε IC | |
| | ΟΥ Τ | |
| | ΕΙ | |

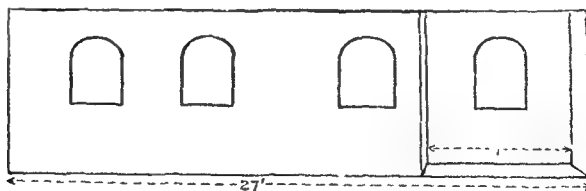
This inscription consisted originally of twenty-two lines, thirteen of which can be restored. That which is lost in the first part is probably no more than a few Byzantine epithets of the Virgin, whose name perhaps occurs at the end of line 13. I hardly think the name of a saint is to be looked for either in line 7 or 8; *παναχράντου* would naturally go with *θεοτόκου*, and if there is a double dedication the Virgin's name would be expected first. The loss in the second half of the inscription may be more serious. The lines, both in this inscription and in the next, are irregular; and it is sometimes hardly possible to determine to which line a letter belongs.

No. 2.—On the left of the porch. W.M.R., H.S.C.

+ICEΛΘOMEN
 A C I V I C T O N N Δ O
 T O Y K v v Δ Λ O
 P E C Δ Λ M V C S
 4 I O N T Δ T H E 5
 Y M M I C O
 Δ P
 K Π O Y
 N
 Λ C 10
 C
 O

This inscription was apparently of the same length as the preceding, but it is even more illegible and difficult to restore. 'Ισέλθομεν in line 1. [ἄγιν? ἰ]ς τὸν ναὸ[ν] in line 2, and τοῦ κ[υρίου] in line 3, is all we can read with even approximate certainty. Perhaps, as Professor Ramsay pointed out to me, the last four letters of line 6 (MICO) may be part of the word *Μίσθεια*, but the reading of the whole inscription is doubtful; and from what we were able to read we regarded it as liturgical in character.

The second dwelling might well have been one of the cells in which the members of the community lived. It measures 27 ft. by 18, and is 8 ft. high. The door is to the south. There are niches in three of the walls, apparently for the reception of the belongings of the inhabitants. The arrangement of the niches on the east wall, one of the longer sides, is elaborate, but can be sufficiently indicated by a rough elevation. The recess to the right is set back about one foot. The niches are five or six inches deep. This cell is about one hundred yards north-west of the chapel.¹



This cell was the only one, so far as we could find, which contained any inscription, and that inscription (No. 3) was much defaced. The letters are deeply cut and of a late type.

¹ The other cells are to the north of it, and are all more or less similar in their arrangements.

No. 3.—W.M.R., H.S.C.

ΧΚΤΙΨΗ
 ΟΝΤΙ//Τ//
 ΑΗΑΙ//ΙΚΚ
 ΟΜ// //Ο
 Τ//

In line 1 the Κ may be ΙC, as the two strokes are not completely joined; the Η in the same line has its horizontal stroke slightly slanting, and might be taken for Μ or even Ν. The line of the roof makes it improbable that a letter stood after Η. In line 2 there are marks after the Ν, which may be a Κ but are more probably scratches on the stone: after the Ι there are traces of C or some curved letter, but most of it has been destroyed. It is doubtful whether any letter stood in the second space indicated in this line. In line 3, there are traces of an Α at the beginning; the horizontal stroke of the second letter is slightly slanting, and after the fourth letter there are indications of a horizontal stroke proceeding from its top. There is an upright stroke after the space. Though any restoration must be provisional, I venture to suggest for the first three lines *οικτείρη[σ]ον* (the itacism *υ* for *οι* is found in No. 1) *τη[ς] π[α]ναγ[ία]ς*. ΚΟΜ may be the beginning of the name of a person, or it may be another epithet preceded by *καὶ*. The restoration *οικτιρμόν* in line 1 also occurred to us.

Between this settlement and the stream (close to the latter; see Sterrett's map) there is a *tepé*. We searched it for inscriptions but found none. We found, however, a large number of stones with Graeco-Roman mouldings and the ruins of a Byzantine church. We found, also, a stone (36 inches by 13) with the figure of a man carved on it, all the more interesting because it was one apparently of the same series with two relief-slabs which we found at a fountain east of Kizil-Euren. They are parts of a frieze with hunting scenes in a rude style. The distance from the *tepé* to the entrance of the Deré I should guess to be about a mile. The road is direct, and it has in parts a stone foundation.¹ The bearing of Kizil-Euren from the *tepé* is 92°; that of the lower of the two khans near the road leading to the Bagharzik Deré, 33°.

Our road from the settlement to the *tepé* was so circuitous that I can give only an approximate idea of the distance between the two. It was probably rather over a mile. The *tepé* is conspicuous, however, both from the entrance to the Deré and from Kizil-Euren.

I have followed Professor Ramsay in identifying the city which once occupied this site with Mistheia, one of the cities of the Orondeis. Though epigraphic evidence is wanting for this identification, all other evidence is strongly in its favour. The Orondeis had another city, Pappa, which can be placed with certainty at Yonuslar, some ten miles off. Pappa was in Byzantine Pisidia. The territory of the tribe, however, extended into

¹ As the stones are found near water or marshy ground, we thought this was Turkish work and

probably not Roman or Byzantine.

² See below p. 101.

Lycaonia, to which province Mistheia was assigned. The natural boundary between the two provinces hereabouts would be the mountains which surround the Bagharzik Deré and separate the tepé from Yonuslar. The site would appear, therefore, to be in Lycaonia, and such as to fulfil the conditions required for Mistheia. Mistheia and its *κᾰστρον*, moreover, come into prominence during the wars with the Arabs. It was a place of great military importance—so great that its capture in 712 was considered worthy of record in a campaign which ended in the siege of the capital. Independently, therefore, of the testimony of Anon. Ravennas (ed. Pinder and Parthey, p. 103; cf. p. 105) we should look for it on an important road. In the district within which it must be sought there are only two such roads—the direct road from Iconium to Philomelium and the road from Iconium to Antioch. The strong position on the former road appears to have been Kaballa;¹ no stronger position could be found on the latter than the Bagharzik Deré near the entrance of which the tepé stands. It only remains to add that the ruins of an old castle—Assar-Kalesi—crown the heights surrounding the pass, and that the capture of Mistheia by Abbas in 712 was followed by the capture of Antioch in 713.²

Yonuslar (= Πάππα).

Our road from the entrance of the Bagharzik Deré must have followed (*vide* p. 109) the line of an old Roman road. The only apparent trace we could discover of it on the east of Yonuslar was by no means above suspicion; it was the headstone of a Turkish grave, turban complete, made perhaps from an old milestone. We could find no trace of an inscription on it. It stands just at the entrance of the valley, from the Kizil-Euren side. Three inscriptions from Yonuslar are given by Professor Sterrett (*Wolfe Expedition*, Nos. 313, 314, 315). The first of these is fragmentary and written in rude characters. As our transcription of it differs slightly from Professor Sterrett's, I give it in uncials without any attempt at restoration.

No. 4.—W.M.R., H.S.C.

ΚΩ//ΤΟΛΔ
 ///ΓΗΤΟΒΟ
 // ///ΛΩ .

We searched for the stone on which No. 315 is inscribed, but we did not find it where Professor Sterrett said it was to be found. We were told that it had been taken to Kara-Ali,³ a village two hours north-west of Yonuslar, and built face downwards into the staircase of the mosque. Circumstances prevented us from visiting Kara-Ali; but, though the visit might prove disappointing, it would be worth a subsequent traveller's while to include it in his

¹ See below p. 111

² Theophanes, ed. Migne, cxi., p. 776. Cf. also Ramsay, *Historical Geography of Asia*

Mona, p. 337.

³ See p. 113.

tour; and we regret that we could not do so ourselves. It is accessible also from Selki in about two hours. Fortunately the particular object for which the inscription might have proved useful has been attained by other means.¹ The two inscriptions next following place the identification of Yonuslar with Pappa practically beyond reasonable doubt.² The first was found in the spring of 1901 by Mr. J. G. C. Anderson of Christ Church, Oxford, and was copied by us in June at Yonuslar. The second was found by us at Tehukur-Aghyl, a village about two miles south-west of Yonuslar. The stone is in the wall of the djami near the staircase. The name of the village is given by Professor Sterrett wrongly, as I believe, as Tehukur-Aghzi.

No. 5.—W.M.R., H.S.C., G.A.W.

| | |
|-----------------|-------------------------|
| ΣΟΥΤΗ | πρεσβευ]τῇ[ν καὶ ἀν- |
| ΤΙΣΤΡΑΤΗΓΟΝΑΥ | τιστράτηγον αὐ[τοκρά- |
| ΤΟΡΟΣΝΕΡΟΥΑΤΡ/ | τορος Νέρουα Τρ[αιαυῶ |
| ΚΑΙΣΑΡΟΣΣΕΒΑΣΤ | Καίσαρος Σεβαστ[οῦ Γερ- |
| ΜΑΝΙΚΟΥΔΑΚΙΚΟ | μανικοῦ Δακικοῦ[ν Τι- |
| ΒΕΡΙΟΠΟΛΕΙΤΩΝΤΩ | βεριοπολειτῶν τῶ[ν καὶ |
| ΠΑΠΠΗΝΩΝΒΟΥΛΗ | Παππηνῶν βουλῇ δ[ι- |
| ΜΟΣΤΟΝΕΑΥΤΩΝΕ | μος τὸν ἐαυτῶν ἐν[ερ- |
| Θ ΓΕΤΗΝ Θ | γέτην |

The date of this inscription is fixed by the titles of the emperor as later than A.D. 103. The omission of the title Parthicus would point to a date prior to 116; of the title Optimus to a date prior to 114. According to Dion Cassius (lxviii. 17) Trajan was in Asia Minor in 114. There is no evidence to show that he ever came as far north as Pappa. The words of Dion Cassius are καὶ οὕτω διανοίας ὧν, ἐπὶ τε τῆς Ἀσίας, καὶ ἐπὶ Λυκίας τῶν τε ἐχομένων ἐθνῶν, ἐς Σελεύκειαν ἐκομίσθη; and they, as Professor Ramsay pointed out to me, imply that the journey was made by sea.

No. 6.—W.M.R., H.S.C., G.A.W.

| | |
|---------|---------|
| ΜΑΡΚΙ | Μαρκί- |
| ΔΝΩΤΑ | αν Ὠτα- |
| ΚΕΙΛΙΑΝ | κειλίαν |
| ΣΕΥΗΡΑΝ | Σευήραν |

¹ Professor Sterrett says 'it is certain that the stone once contained an official document, which probably gave the name of the place.'

² Other inscriptions in which the word Παππηνός occurs are given by Ramsay (*op. cit.* p. 398) and Sterrett (W.E. pp. 196, 255). They

are found at Antioch, Beldjighas, and Saghir respectively. Their character prevents them having any force against an argument founded on the discovery of two inscriptions such as Nos. 5 and 6 on the site.

| | | |
|----|-----------|-----------------|
| 5 | CE/. ΔCTH | Σε[β]αστήν |
| | ΤΙ//ΗΡΙΟ | Τι[β]ηριο- |
| | ΠΟΛΕΙ | πολεῖ[τῶν |
| | ΤΩΝ ΔΠ | τ[ῶ]ν [κὲ Π]απ- |
| | | [πηνῶν βουλή] |
| 10 | Ε | [δημος] |
| | Υ | |

The stone measures 52 inches by 22. The inscription occupied 42 inches by 11½. About half the lines of the inscription are recovered. In line 7 ΟΛ are scarcely legible. Marcia Otacilia Severa was the wife of the Roman Emperor, Philip the Arabian. As he usurped the throne in 244 and was murdered together with his son in 249, the inscription can be dated within narrow limits.

Of the inscriptions found at Yonuslar, the next in importance is that found on a Roman milestone, now used as the headstone of a grave in the cemetery a few minutes east of the village. It is upside down and some of the writing is below the level of the ground.

No. 7.—W.M.R., H.S.C., G.A.W.

IMP CAESA IVI F AVG VST
 TO PONT MAX COS XI DESIG
 XII IMP XV TRIB POTES XIII
 VIAM SEBASTEN CVRANTE
 CORNVTO QV LA LEG O 5
 PROPRAETORE' / FCIT

As there is no doubt about the dative (TO) in line 2, there has evidently been some confusion in this case between the two forms which this kind of inscription takes. The usual form for this series is that found at Selki (p. 105, where the restoration is given). This inscription was also seen and copied by Mr. Anderson. The date of the milestone is B.C. 6. The name of the road is the Via Sebaste. The propraetor's name was Cornutus Aquila. The route of this road can be best discussed after the evidence collected at Selki (Nos. 11 and 12), Khiak-Dedé (p. 108) and Geurunmez (p. 108) has been given.

In a field east of Yonuslar, not far from the milestone, we found two Christian inscriptions.

No. 8.—W.M.R., H.S.C.

μνή-
μη τῆς
μακαρί-
ης Ὁρε-
στίνης.

It may be taken for granted from the cross on the stone, that Orestina was a Christian. The word *μακάριος* may not justify us in saying she was a martyr, but the point is interesting. Orestinos is the name of a Christian presbyter whose monument is found at Bedel-Kaleh near Khatyukhan (*C.I.G.* 3989 m).

No. 9.—W.M.R., H.S.C.



μνήμη
Τάτειος

The ϵ of *Τάτειος* was begun on the second Γ .

The remaining inscription is found in a house not far from the principal oda. The stone was originally triangular, but the upper part has been broken off. The inscription occupies the lower part. Above the inscription is the foot of a cross, and on each side of the cross an eight-pointed star. Professor Ramsay tells me that six-pointed stars are frequent in the Christian inscriptions in Lycaonia, and eight-pointed in those of Pisidia. Both are found elsewhere; but he has noticed no eight-pointed stars in Lycaonia, and no six-pointed stars in Pisidia. The inscription is as follows:—

No. 10.



Ἰωάννου Βικαρί[ου].

The title *βικάριος* (or *οὐκάριος*) is well known as the title of a civil official (cf. Du Cange and Sophocles *ad verb.*). The character of this monument made us wonder if the title was used here as a technical ecclesiastical term. It would be interesting if this were the case, and there is nothing in the nature of things which would make such a use unlikely. I can, however, find no authority for it. The use of *βικάριος* in the letter of Hadrian I. con-

tained in the Acts of the Seventh Council (Mansi 12, 1058—*τὸν βικάριον αὐτῶν*, of the Roman bishop as the representative of Peter and Paul) is worth noting.

On leaving Yonuslar our course lay south-west through Tchukur-Aghyl to Sevindjik. With the exception of the one already given, we found no inscriptions; but at Yegiren (two miles from Tchukur-Aghyl) we found two carved tombstones. The one was triangular in form and had a base of sixteen inches; a lion was engraved on this stone. The other was a fragment—about one-third—of a larger stone, originally of similar shape; the portion which remains measured two feet by fifteen inches, and was from the lower left-hand corner. The subject depicted on the stone is a funeral feast, the treatment of it being not quite conventional. From left to right are represented standing a boy, two women and a man; they are on the left of a table; under the table stands a water-pot.

Boundary Stones near Sevindjik.

At Sevindjik we were told that at no great distance there were two stones with writing on them. We went, therefore, up the low hill to the west of Sevindjik, and, after going in an almost true westerly direction for twenty minutes, we came across the two fragments of the first stone. The fragments lay some ten yards apart; on the one was the lower part of a ζ , on the other the rest of the ζ and the letters $\kappa\zeta$. The second stone, still intact, was forty minutes almost due west from the first, and had on it the letters $\Lambda\rho\Delta$ with a second Δ carved to the right of the first. The Δ 's were six inches high, the ρ ten. The stones were large flat masses of common stone, and were presumably numbers 227 and 134 of a series of boundary-stones running from east to west. For the western terminus of the series, the shore of Bey-Sheher lake at once occurred to us. In the line, however, which we were following, the shore is, according to Sterrett's map, nine or ten miles distant from Sevindjik. We cannot certainly allow more than four miles an hour for our rate of travelling; and, in order to place the first stone of the series on the shore, we must assume that its earlier stones were somewhat further apart than those we met with. The lake is so natural a western boundary for the *πόλις* to which the stones belonged, that I have not much doubt that such an assumption may be made. The assumption is rendered easier by a discovery we made three days later, when, in travelling from Geurunmez to Bey-Sheher, we had to traverse—westward of the second stone—the probable line of the series; and we found what may fairly be taken as three separate traces of its continuation towards the lake. The first and second were the fragments of two stones, similar in character to the first two, piled in two heaps, as far as I could judge, in the right line. The third stone was some few minutes nearer to the lake, but was also, I should say, in the right line. It was only partially broken, and had on it traces of a Λ and some other letter. The ground on which it had originally rested had been dug up in search of treasure. It was about a mile north of Eflatun Bunar. Taking

all things into consideration, it is very probable that the boundary of two cities ran roughly east from the lake, passing a mile north of Eflatun Bunar to within a mile or so of Sevindjik. The city to the south would be the city which once occupied the site of Bey-Sheher, where Professor Ramsay places Karallia: and the boundary of the city would in that case be also the boundary of the Byzantine Province of Pamphylia. To the north would be the Byzantine Province of Pisidia, and perhaps the territory of the *πόλις* which stood on the site of Kirili-Kassaba. The scales, it may be noted, on the large map which accompanies Professor Sterrett's *Wolfe Expedition* are wrong 1:600,000 is a trifle under ten miles to the inch, not five as the scales represent it. The figures, therefore, on the scales must be corrected from 5, 10, 15, &c. to 10, 20, 30.

Selki-Serai.

From Sevindjik we went to Selki-Serai, where we found the 44th and 45th milestones of the Via Sebaste. With the help of the milestone at Yonuslar, they can be restored almost to completeness. One of these must be the one mentioned by Sarre (*Reise in Kleinasien*, p. 122).

No. 11.—W.M.R., H.S.C., G.A.W.

IM CAES
AVGVSTVS ON
C'ES XI DESIG XII
XV TRIB POT XIIX
VIAM SEBASTE CVRAN 5
CORNVT O ALE
SVO PROPRAETO
LIV

No. 12.—W.M.R., H.S.C., G.A.W.

NC
AV VS₁
COT SA DE I
VIAM / SEBASTE 5
CORNVT O VIL
PRO^pRAET R
XIV

The type of inscription which originally stood on these milestones may be restored as follows:

Imp(erator) C(aesar, Divi f(ilius), Augustus,
Pont(ifex) Max(imus), Co(n)s(ul) XI, Desig(natus)
XII, Imp(erator) XV, Trib(unicia) Potes(tate) XIIX.
Viam Sebasten, curante
Cornuto Aquila legato suo
pro praetore, fecit.

Kiosk and Neighbourhood.

From Selki we went to Kirili-Kassaba via Kiosk. The discovery of two fragments at the latter place—the one the finial of a roof—with the eight-point star on them, may imply, especially in conjunction with other evidence that Kiosk was in Pisidia. The inscription found at Yenidje (No. 14), as well as that found at Toldje (No. 15), is of little importance.

No. 13.—W.M.R., H.S.C., G.A.W.

ΚΤΟΛΙΕ
ENC-
ΡΕΙΘ

The first two letters of line 1 are very doubtful.

No. 14.—W.M.R.

| | |
|------------|------------------|
| ΦΙ | Φι[λίππω πατρὶ |
| ΚΑΙΛΑΙΔΙΜΙ | καὶ Λαίδι μ[ητρὶ |
| ΜΗCΕΝΕΚΕ | μνή]μης ἔνεκε[ν |

No. 15.—W.M.R., H.S.C., G.A.W.

| | |
|---------|---------------|
| ENC | ενο[ς κὲ Τάτ- |
| ΑΜΗ | α μῆ[τηρ τῆς |
| ΤΕΚΝΥ | τέκνυς [Μα- |
| ΡΚΙΑΝΩΙ | ρκιανῶ [καὶ |
| ΕΙΡΗΝΗΜ | Εἰρήνῃ μ[νή- |
| ΜΗCΧΑΡ | μης χάρ- |
| ΙΝ | ιν |

Below this inscription, which is Christian, are two shepherd's crooks crossing each other. The last two inscriptions were copied on our journey from Geurunmez south.

Kirili-Kassaba.

Though we were not able to discover any fresh inscriptions at this place, we took the opportunity to examine afresh the inscriptions given by Professor Sterrett (*An Epigraphical Journey in Asia Minor*, pp. 184–186).

Of No. 187 in his book we made as follows:—

No. 16.—W.M.R., H.S.C., G.A.W.

///CICΛIOCMAPK///OCCTATIΩNAPIOC
ΛΟΛΛΙΑΜΑΤΡΩΝΗΤΗΚΑΙΕΛΠΙΔΙ
CYNBIΩΓΛΥΚΥΤΑΤΗΜΝΗΜΗC
ΧΑΡΙΝ

Ἰού]λιος Μάρκ[ελλ]ος στατιωνάριος
 Λολλία Ματρώνη τῇ καὶ Ἑλπίδι
 συνβίῳ γλυκυτάτῃ μνήμης
 χάριν

The first three letters of line 1 are much defaced. They may be ΛΟΛ, but probably they are the first three letters of Ἰούλιος. The lid of this sarcophagus is used to support the bridge which stands near. We could trace the following letters on its edge. The restoration, with the exception of the father's name, is very doubtful.

No. 17.—W.M.R., H.S.C., G.A.W.

| | |
|--------------------|----------------------------|
| ΛΗΗC ΛΥCΙΜΑΧΟΥ ΕΙΤ | Μ]άνης Λυσιμάχου ἐ[κ] τ[ῶν |
| ΔΙΩ | Ν |
| | ἰ]δίῳ[ν ἀναλωμάτῳ]ν |

In No. 188 the last letter of line 2 should be a C, and the restoration of the two first lines Θεόφι[λ]ος Σε[βαστοῦ ἀπελευθέρ]ος (perhaps the second ε in this word is O). There is an unengraved space after ἐπίτροπος in line 3.

In No. 189 we read as follows :—

No. 18.—W.M.R., H.S.C., G.A.W.

| | |
|----------------------|--------------------------|
| ΙΟΥΡΝΟΥCΙΔΙΑΝ |]ουρνουσιδιαν |
| ΟΥΑΛΕΝΤΙΛΛΑΝ | Οὐαλέντιλλαν |
| ΤΗΝΑΞΙΟΛΟΓΩΤΑ | τὴν ἀξιολογωτά- |
| ΤΗΝΜΑΤΡΩΝΑΝCΥΝ | την ματρῶναν συν- |
| 5 ΓΕΝΙΔΑCΥΝΚΛΗΤΙ | γενίδα συνκλητι- |
| ΚΩΝΤΗΝCΕΜΝΟΤΑΤΗ[] | κῶν τὴν σεμνοτάτῃ[ν |
| []ΦΙΛΟΤΕΚΝΟΝΓΥΝΑ[] | καὶ] φιλότεκνον γυναι[] |
| Κ[]ΚΑ[]ΠΟΥΡΝΙΟΥ | κ[α] Κα[λ]πουρνίου |
| ΜΑ[]ΡΚΕΛΛΟΥΤΟΥΚ | Μαρκέλλου τοῦ κ[ρα]- |
| ΤΙCΤΟΥ | τίCτου |

In lines 8 and 9 there is a hole in the stone, which has not there been engraved. The final α of γυναῖκα we could not find, nor the final ν of σεμνοτάτην. We could find no traces of ΠΑ at the end of line 9, but there was room for the letters and Professor Sterrett reads them. Line 1 is undoubtedly the first line of the inscription and has lost only a few letters at the beginning; the Δ also is certain. Otherwise I should like to adopt the suggestion of a friend and read Καλπ]ουρν[ί]ου Σιλίαν, with the names of Calpurnius' child or children before it. The epithet φιλότεκνον would in that case be appropriate.

Khiak-Dedé or Kirikli

At Khiak-Dedé, which we visited on our way from Kirili-Kassaba to Geurummez, we also verified the inscriptions given by Professor Sterrett (*Wolfe Expedition*, pp. 194-196).

In No. 319 the restoration of the inscription should read as follows:—

No. 19.—W.M.R., H.S.C., G.A.W.

Βαβεῖς Πανταλέοντος Ἀμφί[ο]νι
Κάστορος τῷ ἀνδρὶ καὶ Μνησιθέῳ Ἀμφε[ί]ονος.
Κάστωρ Ἀμφείονος Βαβεῖ τῇ μητρ'.

In line 6 of No. 320 we could just discern the right hand upper stroke of the Υ, before ΟΙC. The restoration must therefore be ὕ[ο]ις and not τέκν[ο]ις.

Of one of the two milestones of which Professor Sterrett speaks, it is impossible to make anything. The other, which has lost the upper half and practically all the inscription, was dug up for us. We were able to make out the following symbols, ΜΧΧ[...], i.e. Milia passuum XX. . . I thought I could trace ΙΧ after the ΧΧ.

The existence of three milestones (we were shewn a third), or parts of them, at Khiak-Dedé, implies that the Roman road from Antioch to Selki passed at no great distance. The village in fact stands just on the western edge of the long glen down which the road from Neapolis must have come.

The identification of this last city with Karagatch, put forward by Professor Ramsay so far back as 1884 (*op. cit.* p. 396), is confirmed by an inscription, fragmentary but of great importance, which we discovered at Khiak-Dedé.

No 20.—W.M.R., G.A.W.

| | |
|----------|-------------------------------|
| ΝΕΚ[...] | Νεα[πολειτῶν ὁ δῆμος ἐτίμησεν |
| ΤΗΛ[...] | Τηλ[έμαχον τὸν καὶ Βιάνορα |
| ΤΟΝ[...] | τὸν [ἐαυτῶν εὐεργέτην καὶ |
| ΣΩΤ[...] | σωτ[ῆ]ρα |

Telemachus Bianor is mentioned in two inscriptions found at Salir (five miles from Karagatch, *W.E.* Nos. 328, 329). A Telemachus is mentioned also in *E.J.* No 183, at Karagatch. All mention of him, or his family, confirms the impression given by this inscription that they were persons of rank and public spirit.

On our way south from Khiak-Dedé we passed through Tchaush to Geurummez. At Tchaush we found nothing. On the east side of Geurummez we found, in fairly complete preservation, the remains of a bridge of undoubted Roman workmanship. From Geurummez we went to Bey-Sheher *viz* Yenidje and Eflatun Bunar.

The Via Sebaste.

It may be convenient to collect together the evidence with regard to the construction and course of this important road. We are now able to say for certain that the name of the road is the *Via Sebaste*, and not the *Via Regalis*;¹ and that it was constructed in B.C. 6 by Cornutus Aquila. It connected the Pisidian colonies of Augustus. We know from a milestone that it went to Comama,² and that the distance thence by road to Antioch was 122 Roman miles. This number corresponds with the sum of the distances from Comama to Apollonia and from Apollonia to Antioch.³ Professor Ramsay has, therefore, pointed out that the Antioch-Comama branch must have gone by Apollonia. As no other milestone on this branch can be assigned for certain to the Augustan period, we cannot trace its course with precision. With regard to the other branch, which connected Antioch and Lystra, we are, thanks largely to discoveries made in the past twelve months, in a far better position. It went from Antioch to Karagatch, and thence somewhat east of Khiak-Dedé, where it probably divided. One branch went south to Bey-Sheher *viâ* Kirili-Kassaba, where a milestone of large size is to be found,⁴ the other went *viâ* Geurunmez and Selki-Serai to Yonuslar. It is with this second branch that we will deal first. As the two milestones we found at Selki-Serai (Nos. 11 and 12) are consecutive, it would appear that they are at present near their original position; and as the numbers on them agree closely with the direct distance of Selki-Serai from Antioch, they may be taken to confirm the evidence afforded by the Roman bridge at Geurunmez, that the *Via Sebaste*—or rather the branch which went to Lystra—followed a direct route across the plain from near Khiak-Dedé to Selki-Serai. We followed it for some distance after it left Selki-Serai; and it can be traced as far as Yonuslar, where another milestone (No. 7) has been found. From Yonuslar the natural, in fact the only practicable, course for the road is through the Bagharzik Deré. It is when the eastern entrance of the Deré is reached that its course becomes doubtful. It is impossible to lay much stress on such evidence as is afforded by the track of which I have made mention on p. 99, and it is very doubtful whether the work is Roman work at all. It is, however, highly probable that the road followed more or less the line of this track, passed by the tepé, across the plain, and over the pass by Bulumia to Zoldera (Lystra). The evidence, such as it is, is chiefly circumstantial. Compared with the alternative routes, there is a saving of half the time, or practically a day's march. From the mouth of the Deré to Zoldera, as the crow flies, it is 26 miles; from the same point to Konia and on to Zoldera it is over 50; even if the road turned south as soon as the hills west of Konia were passed, it would not reduce this latter distance by much. We were told that there was a horse-track, not now practicable for waggons, from the tepé to Zoldera *viâ*

¹ Compare *C.I.L.* 6974 and Nos. 7, 11, 12.

Serai 11 or 42.

² *C.I.L.* 6974.³ The distance by road from Antioch to Khiak Dedé is 28 or 29 miles, from Antioch to Selki⁴ This milestone has no inscription on it legible

Bulumia; the route, however, was reported to be easy; it is certainly not high, and offered no serious difficulty to baffle the skill of Roman engineers. Indeed I think it more than likely that our informants, fearing that we should go to Bulumia, framed their answers accordingly, and exaggerated the difficulty of the pass; we had an arabah with us and one of our informants was the arabahji. There are two points, moreover, of a more positive nature which ought not to be neglected: first, in the Acts of Paul and Thecla,¹ Onesiphorus is said to have come from Iconium to meet St. Paul; he proceeded along a road from Iconium as far as the Royal Road that leads to Lystra. At the junction of the two roads he met St. Paul. Whether that point of junction was near Kizil-Euren or not, may not be certain; but the main destination of the βασιλική ὁδός—or the Via Sebaste, for the two names may be taken as equivalent²—was clearly Lystra. This, moreover, appears to me to imply that the Via Sebaste did not go to Iconium, and even that the road from the junction to Iconium was the less important of the two roads. All this is consistent with the Bulumia route. The second point I mention with some diffidence. On Ptolemy's map the distance of Lystra from Pappa is as near as may be the distance it would be by Bulumia. The bearing he gets wrong. His accuracy in one detail may be due to the fact that he had the measurements of a Roman road to guide him.

Turning to the southern branch of the road, we are left more or less in the dark as to the course it followed, or indeed as to its existence. There is a milestone of large size at Kirili-Kassaba. It is probable enough in itself that the site of Bey-Sheher was occupied by the Romans even in Augustus' time, and it is somewhere in this region that we are almost bound to look for Parlais. For some distance before Bey-Sheher is reached, a road, either Roman in its construction or constructed from Roman materials, runs by the side of the caravan-route; the bridge at Bey-Sheher is made apparently from similar materials, and it has a portion of one arch—the right-hand portion of the first arch from the Itcheri-Sheher side—of definite Roman work. There are milestones south of Bey-Sheher at Gulgurum, Avshar, and Aktchelar; but as they are either uninscribed, or for all practical purposes illegible, they are of no use to fix either the name or the date of the road to which they belong. They are, however, of large size.

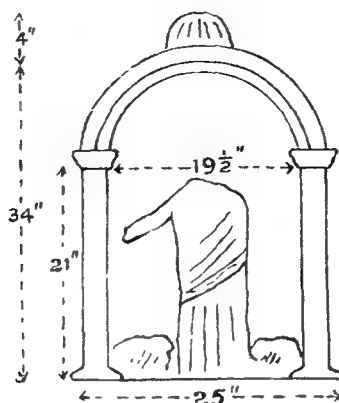
Kara-Assar.

Our route from Bey-Sheher, however, did not follow the line of this road, though we kept on the left bank of the Irmak as far as Begdemir; then we crossed the river to Kara-Assar. Both there and at Fassiler we found many sepulchral monuments, and not a few traces of Christianity. At Kara-Assar we turned to the left as soon as the village was reached, and, following a foot-path leading round the foot of the hill on which Kara-Assar stands, we found the Christian symbol $\Delta\omega$ carved on the rock, and frequently repeated. Farther (two minutes) west and directly behind the last houses of the

¹ Chap. 1, cf. Ramsay, *The Church in the Roman Empire*, p. 30 ff. and the note on p. 31.

² The Emperors were called βασιλεῖς in purer, σεβαστοί in Latinizing Greek.

village, we found, at a height of forty or fifty feet, a small niche about 38 inches by 25, of which the following is a rough representation.



As the figures within the niche were two animals and a man, and as the animals had some resemblance to lions, it is easy to conjecture Daniel in the den of lions as the subject of the group; it was a favourite subject among Christians. The work, however, is not of early date. There are many sarcophagi behind the village, and more still on the steep side of the hill above the village to the west. These latter are raised on steps cut out of the rock,¹ from which in many cases the sarcophagi also are cut. At the top of the hill to the west, in the dip between the two peaks, there is a level space of ground about five yards by four. On the south side of this space there is a sham door cut in the face of the rock, and round it are seats. A piece of rock near the centre of the space, but rather to the north, has been hollowed out to form a bowl. The letter ψ , I presume ω , is found on the walls. Kara-Assar is visible on one side, and there is a magnificent view of the lake to the north-east. More than one of the sarcophagi had been inscribed, but the inscription on one only was at all legible.

No. 21.—W.M.R., H.S.C., G.A.W.

Αὐρ. Μ[

.

.

ἑποίησαν ἑαυτο-
ῖς μνήμης
χάριν

This inscription was carved on a raised panel, and on each side of it was a garland in relief. At the foot of the inscription were two leaves, pointing inwards, one on either hand. In another instance the sarcophagus had carved on its face a bust with a garland on either side.

¹ The topmost step in one case was 6' 4" by 12 1/2" high, the next was 10' 3", the third and the fourth increasing proportionally in length.

By the side of the top-step were two flat projections, perhaps for statues.

Fassiler.

Two of us took the shorter but steeper road from Kara-Assar to Fassiler, passing over the mountains to the east; the others went by the plain. Inscriptions from Fassiler are given by Professor Sterrett, *Wolfe Expedition*, pp. 163-170. To inscription No. 277 of his collection the following additions should be made. Between the Dioscouri there is an altar; line 5 is almost certainly $\Sigma\Delta\Delta\text{AMEI}$; line 6 ΣI only (= $\Sigma\delta\alpha\mu\epsilon\iota\sigma\iota$).¹

On the right of the valley in which lies the Hittite stele described by Professor Sterrett, both on the face of the rocks and in the high ground beyond them, there are abundant traces of a burying-place of considerable extent. As at Kara-Assar, the monuments and tombs are cut in the rock itself. One tomb had a panel with a six-pointed star on each side. Another had the busts of four persons cut in high relief. A third was divided by two pillars into three compartments. In the centre compartment were two twigs of vine with a bust between them. On the right above was another bust, on the left an object completely defaced. In the right compartment was a half-figure holding some symbol, perhaps a thunderbolt; in the left compartment there was a seat. This burying-ground produced only two inscriptions, one of which is a mere fragment.

No. 22.—W.M.R., H.S.C., G.A.W.

Αὐρ. Τίττις Κάστορος ἐποίη-
σεν ἐατῇ μνήμης χάριν.

No. 23.

, μνήμης] χάριν καὶ γυναικί.

We found also a small stele, the lower part of which has been cut off. It now measures nine inches high by seven wide. Two busts in high relief are carved on it, that on the right being that of a man; that on the left is smaller and probably represents a woman. The head of this smaller figure is radiated and the rays—it is probably an elaborate head-dress—are painted red. The following letters are all that remain of the inscription— KAYMENT . At the top of the stele is a small circular hole with a boss in its centre. The woman, it should be noted, is on the right of the man.²

If it is a fair inference to make from the existence of the six-pointed star, mentioned above, that Fassiler was in Lycaonia, it is fair also to infer from the method of burial a close connexion between Fassiler and Kara-Assar, and to carry the borders of Lycaonia westwards as far as the Imak.

¹ Lines 5 and 6 may give the old name of Fassiler. I have, however, Professor Ramsay's permission to mention his conjecture that Fassiler and Vassala are identical. Experiments made with Turks on many occasions showed that to Turkish ears there is little

difference in sound between the two names. When Professor Ramsay asked the way to Vassala he was told how to go to Fassiler.

² Cf. however, Ramsay, *Cities and Bishoprics of Phrygia*, I, p. 262.

Baindir.

On leaving Kara-Assar we kept on the east side of the river to Tchivril, Avdandjik and Baindir, where we found the following half-metrical inscription, written in good characters round the edge of a sarcophagus. Characters ω , ϵ , ζ .

24.—W.M.R., H.S.C., G.A.W.

*Ενθαδε κείτε ἀνὴρ πολλῶν προφερέστερος ἀνδρῶν Φλαύιος
Φλαυράν[τι]ος ὃς ἐν. . .

Davghana.

Thence we went *viâ* Tchonina to Davghana, where we found four inscriptions; two of which, however, came from Kara-Ali, and one from a place called Karaja-Euren-Eyuk. This last is inscribed on a mock panel cut on a flat stone. The letters are very rude—as rude as the spelling. The δ is formed thus Δ , the α thus Δ .

No. 25.—W.M.R., H.S.C.

Αὐριλία
Δόμνα ἐ-
ντάδε
χίτε

Of the two inscriptions from Kara-Ali one is a mere fragment $\epsilon\iota\tau\iota\varsigma\ \mu\eta\mu\epsilon\iota$. The other is inscribed on the upper part of a panel on which is a relief; above the panel is a pediment the right half of which is lost.

No. 26.—W.M.R.

ΑΤΤ ΑΜΥΝΤ
Ν ΙΛΕΝΕΚΕΝΚ/
ΠΤΩΑΡΕΤ
ΕΝΕ

Αττ[αλος Ἀ]μύντ[α ἐν-
ν[οί]ας ἔνεκεν, κ[αὶ]
θρε]πτῶ ἀρετ[ῆς
ἐνε]κεν

The remaining inscription is

No. 27.—W.M.R.

ΗΛΙ
ΡΙΠΠΙ
ΕΝΘ
ΑΔΕΚΙΤ

Αὐρ]ήλιος
Ἀγ]ριππῆ
νος] ἐνθ-
ἀδε κίτ[ε

From Davghana we returned in a single day to Konia—a day which added no inscriptions to our collection. I am able, however, by Professor Ramsay's kindness, to publish three inscriptions found and copied by him in 1886, and, I believe, not published hitherto. They belong to the district through which we had been travelling.

Kyr-Stefan.

No. 28.—W.M.R. 1886.

ΚΑΙ ΒΑΛΒΙΟΑΣ ΑΜΟΟΥ ΚΑΙ ΤΑΡΑCΙC ΤΑΤΑ ΚΑΙ ΚΡΑC
COC ΚΡΑCCOΥ ΓΑΛΛΙΚOC ΜΝΗΜΗC ΧΑΡΙΝ

*καὶ Βαλβιόας Ἀμόου καὶ Τάρασις Τάτα καὶ Κράσ-
σος Κράσσου Γαλλικὸς μνήμης χάριν.*

The stone on which this inscription is found is carved in a somewhat elaborate manner. It is divided into three compartments by pillars. The outside compartments have an arched top, the centre compartment one which forms two sides of a triangle of which the angle at the apex is very obtuse. At the apex is a boss. In the centre compartment is a horseman facing right, in the right and left compartments are respectively a woman and a man facing inwards. The names represent Isauria, Pisidia, and Rome.

Millegö: near Davghana.

No. 29.—W.M.R. 1886.

ΧΥ ΠΑΡΟΝΤΟC

Χ(ριστο)ῦ παρόντος

Tchigil.

No. 30.—W.M.R. 1886.

[πα-(?)]

| | | |
|---------------|--------|------------------------------|
| ΤΡΟCΜΕΝΟΝΤΕC | / | τὸς μὲν ὄντες [ἐν |
| ΤΑΦΩ ΑΝΔΕΤΕΚΙ | /// | τάφῳ [ἐ]ὰν δὲ τέκ[νοις φιλτ- |
| ΑΤΟΙC | ΦΕΤΟΙC | άτοις [μνή- |
| ΜΗC | | μης |

With reference to this last inscription (which is in iambic senarii) I have Professor Ramsay's authority to say that after our recent exploration he adheres to his opinion that Kaballa is to be placed at Tchigil, and not at Kavaklu. It is at the latter place that Mr. Anderson and Mr. Sarre wish to place it, and for a time Professor Ramsay was inclined to defer to their authority (see *J.H.S.* 1898, p. 128).

B.—KONIA.

I have already mentioned that we occupied the time between our journeys in collecting inscriptions in Konia. Counting those which are now in the Museum and those which came to us through Dr. Diamantides, the number of them is considerable. The space at my disposal enables me to give at present only those which are now in the Konia Museum,¹ and some of the more important inscriptions from Konia itself. The rest I hope to publish later.

¹ There is no indication that any of those that I give under this head came from Konia originally.

Konia Museum.

No. 31.—From *Boz-Kir* (district round *Isaura*). W.M.R.

Ἰασος λατύπος ἐποίησεν.

The sculptor's name is given in *C.I.G.* add. 3827 vy, 3830, add. 3857 r, add. 4216 and 4393, but these inscriptions give no clue to the name of the sculptor here.¹ The monument was adorned with an arcade, one arch of which remains complete, with parts of two others. In the centre (and complete) arch are three figures.

No. 32.—From *Istanos* (*Isinda Pisidiae*). W.M.R.

A woman between two horsemen, facing inwards.

Μάγας Ἀπολλωνίου Διοσκό-
ροις εὐχήν.

This type of monument is dealt with very fully by M. Perdrizet in the *Annual of the British School at Athens*, No. III. pp. 156-169. The woman he identifies with Helen, the horsemen with the Dioscuri. In his opinion a connexion, direct or indirect, can generally be established between the place where this type is found and Sparta.

No. 33.—From *Adulia* (*Attulia Pamphyliae*). W.M.R.

| | |
|-----------|------------|
| ΜΑΡΚΟΣ ΑΥ | Μάρκος Αὐ- |
| ΡΗΛΙΣ ΣΩ | ρήλις Σώ- |
| ΖΟΝΤΙ ΥΠ | ζοντι ὑπ- |
| ΕΡΤΕΚΝ | ἐρ τέκν- |
| ΩΝΕΥΧΗΝ | ων εὐχήν |

For Σώζων, compare *B.C.H.* 1878. p. 171, No. 2; 172, No. 4, and 1880, p. 291 ff. 1896, p. 98; *J.H.S.* viii. (1887), p. 230; and xv. (1895), p. 129; *Ramsay Cities and Bishoprics of Phrygia*, I, p. 262, especially (4).

No. 34.—From *Ambur-Arasa*. W.M.R.

ΑΔΡΙΑΝΟΥ
ΙΑΝΟΥΥΙΟΥΘΕΟΥΝΕΡΟΥΑ
ΝΟΥCΙΔΑΜΑΡΙΟΥΤΩΝΗ
ΚΑΙΟΔΗΜΟCΤΟΒΑΛΑΝΕ
ΚΑΘΙΕΡΟΥCΑΝΕΠΙΒΡΟΥΤΤΙ
CΕΝΤΟCΠΡΕCΒΑΙΑΝ
ΓΟΥCΕΒΕΠΙΜΕΛΗΘΕΝΤ

¹ These inscriptions and others recorded by Sterrett (*W. E.* Nos. 57, 69) and giving the sculptor's name come from rude localities.

In line 3 Professor Ramsay notes that the Δ is probable, the Μ certain.

Τραιανῶ] Ἀδριανῶ Σεβ(αστῶ) [θεοῦ Τρα-
 ιανοῦ υἱοῦ (!) θεοῦ Νερού[α νίω-
 νοῦ (!) Σιδαμαριωτῶν ἡ [βουλὴ
 καὶ ὁ δῆμος τὸ βαλανεῖον
 καθιέρωσαν ἐπὶ Βρουττί[ου Πραί-
 σεντος πρεσβ(ευτοῦ) καὶ ἀν[τιστρατή-
 γου Σεβ(αστοῦ), ἐπιμεληθέντ[ων τῶν δεινῶν

Bruttius Praesens was legatus Augusti pro praetore. A Gaius Bruttius Praesens, probably the same person, was consul a second time with Antoninus Pius in A.D. 139 (*C.I.G.* 3175, a decree which conferred on Smyrna, in accordance with Hadrian's intention, the right to institute games such as he had already instituted at Athens). In *C.I.G.* add. 5875a² (Venusia) a man called Sagaris offers a thank-offering to Mithra for the safety of Bruttius Praesens, whose steward he was. Sagaris is found in *C.I.G.* 3973, 4066, 4083 (Σαγάριος), all from Phrygia and Galatia. This inscription has also been published by Professor Ramsay in the *Revue des Études anciennes*, 1901, p. 279. Sidamaria he says is absolutely unknown: if the Μ were not certain and Sidallaria could be read, the town might be identified with the Byzantine fortress Sideropalos which was situated in this district. The first half of the modern name (Ambar) may represent the last half of the old name. This inscription was, I find, published by M. Pridik in the *Revue de l'Instr. publique de Saint-Petersbourg*, 1900 (March-April), pars philologica, p. 19. Cf. Cagnat, *Inscriptiones Graecae ad Res Romanas pertinentes*, p. 127. M. Pridik confirms the Δ and Μ in line 3. He conjectures the words Αὐτοκράτορι Καίσαρι before Τραιανῶ.

No. 35.—Also from *Ambar-Arasu*. W.M.R.

| | |
|-------------|--------------|
| ΕΥΧΗ | Εὐχή |
| ΜΑΡΚΟΥ | Μάρκου |
| ΚΕΚΡΙCΠΙΝΗC | κὲ Κρισπίνης |
| ΜΕΤΑΤΩΝΕΙ | μετὰ τῶν εἰ- |
| ΔΙΩΝΑΥΤΩΝ | δίῳν αὐτῶν |

The inscription given on page 16 of the *Wolfe Expedition* (No. 11) is now in the Konia Museum. A few letters have been destroyed in transporting the stone: otherwise our readings do not differ from Professor Sterrett's in any important point. The restoration of the last line should be, I should think,

τὴν θυγατέρα τῆς δὲ ἀνεψιάν

and the girl commemorated would be the daughter of Polyclitus not of Sibylla.

Of the localities from which the other stones were brought there is no indication. Three of these are of the same type as the stone mentioned by Sterrett, *Epigraphical Journey*, p. 196.¹ They are solid blocks in the shape of

¹ This stone is now in the Museum at Konia.

‘small sarcophagi. The two ends represent temples with gables, between whose columns stand figures in bas-relief.’

No. 36.—W.M.R., H.S.C.

| | |
|---------------|----------|
| ΦΛ ΚΟΝΟΝΑΝΔΡΑ | ΑΕΙ |
| ΜΝΗΜΗCΧ | ΚΜΕΜΝΟΝΑ |

Φλ(άβιον) Κόνον(α) ἄνδρα [αὐτῆς] ἀει[μνηστον
μνήμης χ[άριν] καὶ Μέμνονα

A Φλάβιος Κόνων, a Christian, is mentioned in Sterrett *E. J.* No. 231 (Konia).

No. 37.—W.M.R., H.S.C.

| | |
|--------|------------|
| ΜΑΣΘΑΝ | Μάσσαν |
| ΚΦΡΟΝΤ | καὶ Φρόντ- |
| ΩΝΑ | ωνα |

The name Μάσσαν is, I believe, unknown.

No. 38.—W.M.R.

At one end between the columns are the figures of a man and woman. Above the woman's head is ΤΑΤΑ, above the man's ΤΑC. In the pediment of the other end is the name ΑΝΤΩΝΙΟC, below the pediment ΝΑΝΝΙΩC.

No. 39.—W.M.R.

| | |
|--------------------|-------------------------|
| ΛΙΟCΝΙΙΙΟ//// | Ἰού]λιος Νί[ν]ος |
| ΤΙΟΥΛΙΩΜΕΙΡΩ//// | Τ(ίτω) Ἰουλίω Μείρω[νι] |
| ΑΔ . . ΦΩΚΙΟΥΛ// / | ἀδ[ελ]φῶ καὶ Ἰουλί[α] |
| ΑΓΕΙΑΝΥΝΦ//// | Ἀγεία νύμφ[ῃ] ἀ- |
| ΝΕCΤΗCΕ//// | νέστησε[ν] |
| Μ | μ(νήμης) [χ(άριν)] |

The stone has been broken on the right. The woman's name may be Ἰουλία Γεῖα.

No. 40.—W.M.R., H.S.C.

| | |
|----------------|--------------------|
| CΥΜΦΟΡΟC CΥΜ | Σύμφορος Συμ- |
| ΦΟΡΟΥΑΝΕCΤΗCΕΝ | φόρου ἀνέστησεν |
| ΕΑΥΤΟΝΚΑΙΤΗΝΓΥ | ἑαυτὸν καὶ τὴν γυ- |
| Ν ΑΙ Κ Α | ναῖκα |

| | |
|--------------|----------------|
| ΤΑΤΑ | αὐτοῦ]Τάτα[ν] |
| ΚΑΙΓΑΙΟΝΥΙΟΝ | καὶ Γάϊον υἱὸν |
| ΑΥΤΟΥ | αὐτοῦ |
| ΜΝΗΜΗCΧΑΡΙΝ | μνήμης χάριν |

Between the fourth line and the fifth, the left portion of which is lost, there are the figures of three persons, on the left a man, on the right a woman, and in the centre a boy. The heads of the three figures reach into the fourth line and cut the inscription. The boy is shorter than the other two.

No. 41.—W.M.R.

| | |
|-----------------------|------------------------------------|
| ΕΛΙΝΟΥΣΓΑΙΟΥΛΟΥΚΙΟΥ | Ελινους (?) Γαίου Λουκίου |
| ΣΥΕΘΙΟΥΕΑΥΤΗΣΩΝΚΑΙΟΥΓ | Ο]υέθίου (?) έαυτῇ ζών καὶ θυγ[ατ- |
| ΡΙΑΦΡΟΔΙΤΟΥΔΙΜΝΗ | ρὶ Ἀφροδιτοῦδι μνή- |
| ΜΗΕΧΑΡΙΝ | μης χάριν |

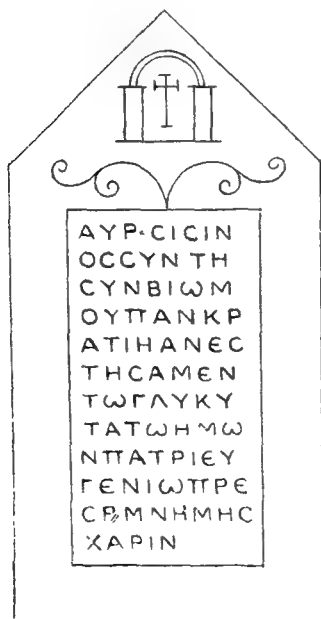
The letters are faint and sometimes hardly legible. Between lines 2 and 3 are figures of a woman and a youth, the youth being on the right. The first names in lines 1 and 2 are doubtful. The name Σελινῶ (acc. case) is found in *C.I.G.* 2373 b.

No. 42.—W.M.R.

| | |
|------------------|--------------------|
| ΘΕΡΟΣ | θερος [τῇ γυ- |
| ΝΑΙΚΙΤΙΕΙ | ναικὶ Τιεί[α μνή- |
| ΜΗΕΧΑΡΙΝ | μης χάριν. |
| ΕΑΝΤΙΣΤΗΝΕΤΗΛΗΝ | Ἐάν τις τὴν στήλην |
| 5 ΑΔΙΚΗΣΕΙΚΕΧΟΛΩ | ἀδικήσῃ, κεχολω- |
| ΜΕΝΟΝΕΧΟΙΤΟ | μένον ἔχοιτο |
| ΜΗΝΑΚΑΤΑΧΘΟ | Μῆνα καταχθό- |
| • ΝΙΟΝ | νιον. |

The husband's name may be Ἐλεύθερος. In 6 and 7 perhaps ἔχοι τὸ[ν] Μῆνα: but the late Phrygian inscriptions often use false middle optatives (see Ramsay in *Philologus*, 1889, p. 754).

No. 43.—W.M.R.



Αὐρ(ήλιος) Σίσιν-
ος σὺν τῇ
συνβίῳ μ-
ου Πανκρ-
ατίῃ ἀνεσ-
τήσαμεν
τῷ γλυκυ-
τάτῳ ἡμῶ-
ν πατρὶ Εὐ-
γενίῳ πρε-
σ[β]υτέρῳ μνήμης
χάριν.

Σίσινος, a deacon, is mentioned in Sterrett, *E. J.*, No. 215. He joins with two others in erecting a tomb to a priest called Δουμέταος. With regard to the place in which No. 215 was found, Professor Ramsay notes that it is not Konia, and that the words ἐπὶ πέτρας εὕρισκομένης ἐν Ἰκονίῳ do not occur in Dr. Diamantides' note-book.

Konia and neighbourhood (First Collection).

No. 44.—*Church of St. George. (Altar.)* W.M.R.

| | |
|---------------|---------------------------|
| ΑΙCΑΡCΕΒΑCΤΟC | Κ]αῖσαρ Σεβαστὸς [Αὐτοκρ- |
| ΤΩΡΕΠΟΙΗCΕΝ | αἱ]τωρ ἐποίησεν τ[ὸ προ- |
| ΚΗΝΙΟΝΤΗΠΟΛΗ | σ]κήμιον τῇ πόλ[ει διὰ |
| ΥΠΙΟΥΠΡΕCΒΕ | Πο]υπίου πρεσβε[υτοῦ |

The simplicity of the title would more than suggest Augustus. Professor Mommsen says 'that it is extremely improbable, I should think impossible, that this name should signify another Emperor than the first.' In *C.I.G.* 3991, a Lucius Pupius Piasens (not probably Πούπλιον as in the restoration) is commemorated as the benefactor and founder of the city of Iconium and the procurator of the province of Galatia. He, however, held this post in the reigns of Claudius and Nero. Even if this inscription is later than Augustus, promotion from the one branch of the service to the other was not the rule and the procurator and the legate are hardly likely to be the same. This inscription is published by Cagnat (*op. cit* p. 124) from M. Heberdey's restoration which is as follows:—[Αὐτοκράτωρ Κ]αῖσαρ Σεβαστὸς [Θεοῦ] | υἱὸς, αὐτοκρά]τωρ, ἐποίησεν τ[ὴν σκηνὴν καὶ τὸ ὑποσ]κήμιον τῇ πόλ[ει τῇ Ἰκονιέων ἐπὶ Πο]υπίου πρεσβε[υτοῦ]. He assigns to it a date between 7 and 14 A.D.

No. 45.—W.M.R.

ΒΕΡΙΟΥΚΑΙCΑΡΟC CΕΒΑCΤΟΥ
 ΧΙΕΡΕΥCΤΟΔΕΥΤΕΡΟΝ
 ΓΑΙΟC CΙΟΥΛΙΟC ΟΑΡΙΟC
 ΠΛΟΥΤΩΝΙ
 Τι]βερίου Καίσαρος Σεβαστοῦ
 ἀρ]χιερεὺς τὸ δεύτερον
 Γάιος Ἰούλιος Ὀάριος
 Πλούτωνι.

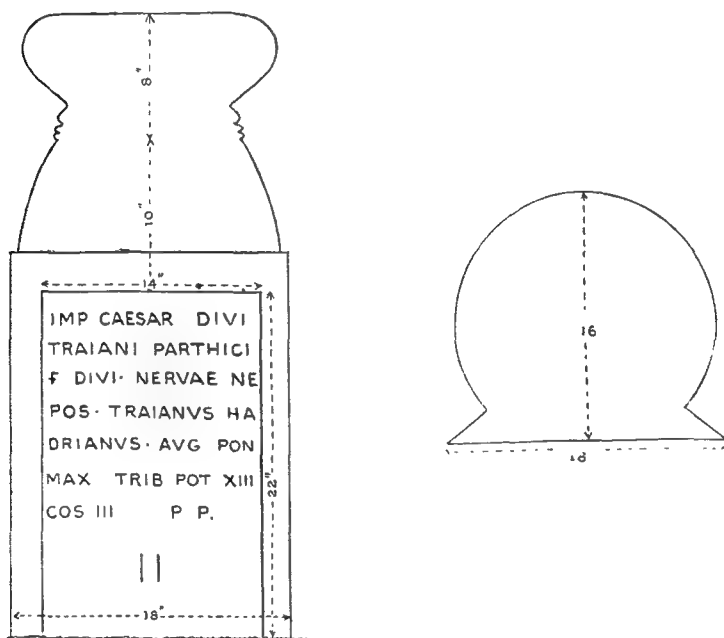
Ὀάριος or Οὐάριος is probably a native name, not the Latin Varius. The correct restoration can hardly be ὁ Ἄριος.

The third inscription (No. 46) is the second milestone of a road constructed (or repaired) by Hadrian. From the locality in which the milestone was found—the cemetery of Seidiler, east of Konia—the road probably led to the east, and it may be the road which some thirty-five miles further on we found

near Yaghli Baiyat (Σάουτρα?). If the reading Trib. Pot. xiii.¹ be right, this road was constructed in the year 129. Before his visit to Alexandria in 131, Hadrian had been in Asia Minor.

As the shape of the milestone is, I believe, unique, I give zincographs of the inscribed side and a horizontal section taken near the base. The inscription is on a panel projecting from the stone.

No. 46.—W.M.R., H.S.C., G.A.W.



Imp(erator) Caesar, Divi
 Traiani Parthici
 F(ilius), Divi Nervae Ne-
 pos, Traianus Ha-
 drianus Au(gustus), Pon(tifex)
 Max(imus), Trib(unicia) Pot(estate) XIII (?),
 Co(n)s(ul) III, P(ater) P(atriae)
 II

The fourth inscription (No. 47) is one in honour of L. Aelius Verus, who was adopted by Hadrian in 135, and died in Jan. 138. The 21st year of Hadrian began in Jan. 137, and the tablet must have been erected near the end of Verus' life. Cf. *B.C.H.* 1899, p. 420.

¹ The reading may be xii, the last i being hardly visible and doubtful.

No. 47.—In the museum, but found at Konia. W.M.R.

| | |
|------------------------|---|
| L·AELIO CAESARI | L(ucio) Aelio Caesari, |
| IMP TRAIANI HADR// | Imp(eratoris) Traiani Hadr[i- |
| ANI AVG PONTIFI | ani Aug(usti) Pontifi- |
| CIS MAXIMI TRIB | cis Maximi Trib(unicia) |
| POT XXI IMP II CoS | Pot(estate) XXI Imp(eratoris) II Co(n)s(ulis) |
| III P.P. FIL DIVI TRAI | III Patris Patriae Filio, Divi Traia- |
| NI PARTHICI NEPO | ni Parthici Nepo- |
| TI DIVI NERVAE PRO | ti, Divi Nervae Pro- |
| NEPOTI TRIB POTEST | nepoti, Trib(unicia) Potest(ate), |
| COS II COL AELIA HA | Co(n)s(uli) II, Col(onia) Aelia Ha- |
| DRIANA ♀ AVG ♀ | driana Aug(usta) |

The next two inscriptions (Nos. 48 and 49) are milestones of Antoninus Pius, the first belonging probably to the year 141, and the second to the following year. The first was found in the streets of Konia, the second in a cemetery to the north. The second may have belonged to the road joining Iconium and Laodicea Combusta.

No. 48.—W.M.R., H.S.C.

| | | |
|-------------|----------|--|
| MP·C | ARIDIVI | I]mp(eratori) C[aesar]ri, Divi |
| TRA | THIC | Tra[iani Par]thic[i |
| NEP·TIDIV// | NERV | Nep[o]ti, Div[i] N[e]rv- |
| AE | IDNI | ae [Pronepot]i, D[iv]i |
| HADR | ADHIO | Hadr[iani Filio, Tit]o |
| HADRI | ITIO | Hadri[ano] An]to- |
| NINOAN | NTIF | nino Au[g(usto), Pon]tif(ici) |
| MAXT | STIII | Max(im)o, T[rib(unicia) Pote]st(ate) IIII, |
| COS·III | ///IL/// | Co(n)s(uli) III |

Line 9 ends with L, but the restoration of the latter half of the line is very difficult. The engraver has blundered. Apparently after omitting Hadrian's name at the beginning, he inserted it after Nerva's and then began to carve again the words DIVI TRAIANI, which stood after it in his copy.

No. 49.—In a cemetery to the north. W.M.R.

| | |
|-------------------|--|
| IMP | Imp(eratori) |
| CAESARI DIVI HA | Caesari, Divi Ha- |
| DRIANI FILIO DIVI | driani Filio, Divi |
| TRAIANI PARTHICI | Traiani Parthici |
| NEPOTI DIVI NERV | Nepoti, Divi Nerv- |
| AE PRONEPOTI TAE | ae Pronepoti, T(ito) Ae- |
| LIO HADRIANO | lio Hadriano [Ant]o- |
| NINO AVGVSTO | nino Augusto, |
| PONTIF MAXIMO | Pontif(ici) Maximo, |
| TRIB P T IIII COS | Trib(unicia) P[ot]t(estate) IIIII, Co(n)s(uli) [IIII], |
| MIL PAS VM | Mil(lia) pas[su]m |
| IIII | IIII |

The next inscription (No. 50) must concern Caracalla; it is later than 211, and as Geta is not mentioned probably later than 212, the reign of Commodus is ignored.

No. 50.—W.M.R.

| | | |
|----------------------|--------|------------------------------------|
| IMP | IVI | Imp(eratori) [Caesari, D]ivi |
| SEP | 'IA | Se[ptimi Sever]i A- |
| RA | H | ra[b(ici) Adiab(enici) Part]h(ici) |
| MA | FIL | ma[x(imi) Augusti] Fil(io), |
| DIVI | NI PII | Divi [M(arci) Antoni]ni Pii |
| GERM SARM·NEPOTI | | Germ(anici) Sarm(atici) Nepoti, |
| DIVI ANTONINI PII PP | | Divi Antonini Pii P[rounepoti]. |

No. 51.—In the Museum, but found in Konia. W.M.R.

| | |
|----------------|---------------------------|
| Λ' ΟΝΕΩΝΚΟ | Ἡ Ἰκονέων Κο- |
| Λ' ΗΑ'Α'ΑΡΡΟΥΝ | λων] (α Λ(ούκιον) Ἀρρουν- |
| Λ' ΛΑΟΝΤΟΝΟΙ Α | τιον] Λόνγον Ούά- |
| Λ' ΟΣΥΙΟΝΗΡΩΑ | λεντο]ς υἱὸν ἤρωα |
| Λ' ΤΕΤΩΝΑ | ὁμοίως] τε τῶν Λα- |
| | [οδικέων βουλῆ(?)]. |

An Arruntius is mentioned in *C.I.G.* 3483 (Thyatira), add. 3882d (near Afion Kara-Hissar) and 4196 (Kotch-Hissar near lake Tatta; also in Sterrett *E.J.* 191 (Konia). The difficulty of this restoration is the spelling *Εἰκονέων*, but Mr. Hill tells me it can be paralleled by the spelling *Ἀνεμουρέων* for *Ἀνεμουριέων* (*B. M. Catal. Coins, Lycaonia* &c. pp. 41, 42).

No. 52.—W.M.R.



Σωσθένης
Ο]ύρανδέως
Διὲ εὐχὴν

No. 53.—W.M.R.

ΑΓΑΘΗ ΤΥΧΗ
ΙΟΥΛΙΟΝ ΠΟΠΛΙΟΝ
ΤΟΝ ΚΡΑΤΙΣΤΟΝ ΕΠΙΤΡΟ-
ΠΟΝ ΑΓΝΕΙΑΚΑΙ ΔΙΚΑΙ-
ΟΣΥΝΗ ΠΑΝΤΑΣ ΥΠΕΡΒΑ-
ΛΟΜΕΝΟΝ ΟΥΣ ΠΡΟ ΑΥΤΟΥ
ΑΚΑΛΠΟΡΕΣΤΗ ΠΡΙΝ ΕΨ

Ἀγαθῇ τύχῃ
Ἰούλιον Πόπλιον,
τὸν κράτιστον ἐπίτρο-
πον, ἀγνεία καὶ δικαι-
οσύνη πάντας ὑπερβα-
λόμενον τοὺς πρὸ αὐτοῦ
Λ(οῖκιος) Καλπ(οῖριος) Ὀρέστης, πρίν κε ψ

| | |
|----------------------|--------------------------|
| ΚΑΙΛΟΓΙΣΤΗΣΤΗΛΑΜΠΡΑΣ | καὶ λογιστὴς τῆς λαμπρᾶς |
| ΕΙΚΟΝΙΕΩΝΚΟΛΩΝΙΑΣΤΟΝ | Εἰκονιέων κολωνίας, τὸν |
| ΕΑΥΤΟΥΚΑΙΤΗΣΠΑΤΡΥ | ἑαυτοῦ καὶ τῆς πατρύ- |
| ΔΟΞΕΙΣΠΑΝΤΑΕΥΕΡ | δος εἰς πάντα εὐερ- |
| ΓΕΤΗΝ | γέτην. |

For this inscription compare *B. C. H.* 1899, p. 418 ff. For *πρίνκεψ* and *λογιστής*, see Marquardt. *Staatserhaltung* (ed. 1873) I. p. 507 note 2, and p. 487 ff.

No. 54.—W.M.R., H.S.C., G.A.W.

| | |
|-----------|---------------|
| ΚΟΙΝΤΟΣ | Κόιντος Ἐ- |
| ΟΥΡΗΝΟΣΜΑ | β]ουρηνὸς Μά- |
| ΞΙΜΟΣ | ξιμος |
| ΝΕΜΕΣΕΙ | Νεμέσει ἐ- |
| ΠΗΚΩ | πηκώ |

This inscription is given by Sterrett (*E. J.* No. 246) though he does not restore it. The name, Quintus Ebureus Maximus, occurs in No. 55 and No. 56 (= Sterrett, *E. J.* No. 192). If the person is the same, he lived in or after the reign of Hadrian; he was high-priest of the Emperor-cult and he married the daughter of Gaius Ebureus Valens. He had two sons, one of whom was called Maximus. In *B. C. H.* 1899, p. 593, M. Perdrizet gives the following restoration of Sterrett's copy. Κόιντος μ[ε]ξιμος Νεμέσεις [ἀνέθηκεν]. He adds the comment, 'un mime romain à Iconium.' In view of the more complete transcription, this restoration must be abandoned.

No. 55.—In the Museum. W.M.R.

| | |
|---------------------|-----------------------------|
| ΚΕΒΟΥΡΗΝΟΣΜ | Κ(όιντος) Ἐβουρηνὸς Μ[ε]ξι- |
| ΜΟCΑΡΧΙΕΡΑCΑΜΕΝΟC | μος ἀρχιερασάμενος θ[εο]ῖς |
| CΕΒΑCΤΟΙCΚΑΚΟΛΩΝΕΙΑ | Σεβαστοῖς [ἐν] κολωνείᾳ |
| ΚΛΑΥΔΕΙΚΟΝΙΕΩΝΜΕ- | Κλαυδεικονιέων μετὰ |
| ΥΙΩΝΜΑΞΙΟΥΤΕΚΑΙ | υἱῶν Μαξι[μ]ου τε καὶ [... |
| ΤΑC ΠΡΩΤΑ CΕΛΙΔ | τὰς πρώτα[ς] σ[ελίδ]ας |
| CΥΝΤ II/// | σὺν τ[ῇ] σπήλυγ- |
| ΓΙΕΚΤΟΝΙΑΙΟ''' | γι ἐκ τῶν ιδίω[ν] |

The *σελίδες* are the benches in the theatre (*Anecdota Bekkeri* 62). *Γάιος* may be the name of the second son. *σπήλαιον* is used of the place behind the scenes of a theatre (Pollux, 4, 125); I suggest a kindred word *σπήλυγγι* as a restoration, though there is no evidence for its use in such a sense.

No. 56.—W.M.R., H.S.C., G.A.W.

ΟΥΡΗΝΑΝΜΑΞΙ
ΜΑΝΘΟΥΓΑΤΕΡΑΓΑ
ΙΟΥΕΒΟΥΡΗΝΟΥΘ
ΟΥΑΑΕΝΤΟΥΘΓΥΝΑ
ΚΑΘΚΟΙΝΤΟΥΕΡ
ΙΝΟΥΜΑΞΙ

Υ

Ἐβ[ουρην[ά]ν Μαξί-
μαν, θυγατέρα Γα-
ίου Ἐβουρηνου
Οὐάλεντος, γυναι[ὶ]-
κα Κοίντου Ἐ[βου-
ρη]νου Μαξί[μου]

This inscription is the same as Sterrett, *E. J.* No. 192. The letters are 2 $\frac{1}{8}$ " high.

No. 57.—Altar-stone in the church of St. Eustathius. W.M.R.

ΑΙΛΙΜΑΡΚΕΛΛΙΝΟΣ
ΥΠΟΔΗΜΑΤΟΥΡ
ΓΟΣΚΑΤΕΣΚΕΥΑΣΕΝ
ΤΟΜΗΔΙΚΟΝΕΚΤΩΝΙ
ΔΙΩΝΕΑΥΤΩΚΑΙΤΗΓ
ΝΑΙΚΙΚΑΙΤΟΙΣΤΕΚΝΟΙΣ

Αἴλιος Μαρκελλῖνος
ὑποδηματοῦρ-
γὸς κατεσκεύασεν
τὸ μηδικὸν ἐκ τῶν ἰ-
δίων ἑαυτῷ καὶ τῇ γ[υ]-
ν[αί]κί καὶ τοῖς τέκνοις

ΟΓΑΝΔΕΕΠΙΣΒΙΑΣΗΤΕΔΩ

ὅς ἂν δὲ ἐπισβιάσῃτε, δώ[σει] κ.τ.λ.

The word ὑποδηματοργός I cannot find; ὑποδηματάριος is given in Stephanus. For τὸ μηδικόν, compare Ramsay, *Cities and Bishopricks of Phrygia*, I, p. 75. Θέματα [Μ]ηδικά, the restoration suggested by him in the note, but rejected as improbable, would appear to be correct. Τὸ μηδικόν is a sepulchre equipped in the Median style; θέματα μηδικά are couches of Oriental or Median form.

No. 58.—W.M.R.

ΓΟΥΡΔΟΣΑΝΗΡΑΓΑΘΟΣ
ΕΝΘΕΥΔΕΙΩΣΤΕΠΕΛΕΙΑ
ΗΕΝΕΝΑΝΘΡΩΠΟΙΣΙΕΡΕΥΣ
ΘΕΟΥΥΨΙΣΤΟΥ
ΤΩΣΤΗΛΗΝΤΡΟΚΟΝΔΑΣ
ΟΔΙΑΔΟΧΟΣΚΑΙΟΠΑΩΝ
ΤΕΥΞΕΝΕΚΑΜΝΗΜΗΣ
ΚΑΙΚΟΣΜΗCΑCΕΠΙΤΥΜΒΩ

Γούρδος ἀνὴρ ἀγαθὸς
ἐνθ' εὐδει ὥστε πέλεια
ἦεν ἐν ἀνθρώποις ἱερεὺς
θεοῦ ὑψίστου
τῷ στήλην Τροκόνδας
ὁ διάδοχος καὶ ὁπάων
τεῦξ' ἔνεκα μνήμης
καὶ κοσμήσας ἐπὶ τύμβῳ.

In a building; the stone adjoined others on which were completed the crosses which stood on the right and left of the inscription. The letters are good. Γούρδος, a presbyter, is mentioned in Sterrett, *E. J.* No. 197, a Τροκόνδας in No. 206 (both Konia). Both inscriptions are in memory of slaves bred in the house. This inscription is in rude hexameters. For θεὸς

ὑψιστος, compare Cumont, *Hypsistos*, in continuation of Schürer, *Sitzungsberichte der Akad. der Wissensch. zu Berlin*, 1897, xiii, p. 200 ff.

No. 59.—W.M.R.

ΑΚΥΛΑΣ
ΜΕΝΙΣΚΟΥ
ΜΗΝΙ ΕΥΧΗΝ

Ἀκύλας
Μενίσκου
Μηνὶ εὐχὴν.

Very rude letters.

The inscriptions in the museum have come together by accident and have no connexion with each other. It is not so, however, with the inscriptions collected from Konia itself, some of which correspond to distinct periods in the history of the city, while others throw light on its life. No. 44, which is almost certainly Augustan, and therefore not far removed in date from the dedication at Lystra and the milestones of the Via Sebaste, is a witness to the care of the Imperial Government for those important native cities which it did not at the time see fit to raise to the rank of colonies. It is not unfair to see in No. 45 signs of the response of the native population to Imperial good government. The vigorous road-making (or road-repairing), to which Nos. 46, 48, and 49 bear witness, marks a period of development of commerce and prosperity. It is interesting to connect this making of roads with the new status of Iconium to which No. 47 testifies, and again to connect both with the condition of affairs in the Empire further East produced by Trajan's wars. Ambar-Arasu (No. 34), it should be noted, lies also on a road from west to east. Of the remaining inscriptions less can be made; but the monument to Julius Publius (No. 53) among the public servants, and the names of Arruntius (No. 51) and the Ebureni (Nos. 54, 55, 56) among families of prominence and public spirit in the district, show that the efforts of the emperors were well supported locally. Nos. 45, 52, 54, and 59 are dedications to native gods, usually under classical names; in No. 58, θεὸς ὑψιστος is a title which belongs to both the native and the Jewish religion, it suggests Jewish influence, and it marks a stage in the general adoption of Christianity; it may even in this instance stand on the monument of a Christian presbyter. It is interesting to contrast in Nos. 47 and 50 the treatment of Verus with that of Commodus; and to find, in the connexion claimed by Caracalla in the latter, fresh evidence of the virtues of the Antonines.

With regard to this latter inscription, it is not beside the point to notice the prevalence of the names Aurelius (before Caracalla as a nomen, after him as a praenomen) and Aelius, and their derivatives. In Asia Minor, moreover, as a whole they occur far more frequently than in any other region of the Empire. This may mean either that Asia Minor had at the period of the Antonines reached a condition to welcome Roman influence, or that it received a special share of the attention of a dynasty everywhere conspicuously alive to their responsibilities.

H. S. CRONIN

AN INSCRIBED BASIS FROM CYZICIUS.

IN the course of a visit to Cyzicus, made last December at the invitation of Mr. de Rustafjaell, Mr. Bosanquet and I had the opportunity of copying and taking impressions of two inscriptions from a marble pedestal (Fig. 1),



FIG. 1.—MARBLE PEDESTAL AT CYZICIUS.

known to the peasants as 'Balik Tash' or 'Fish Stone' from the reliefs carved upon it.

The stone lies in a vineyard on the low ground of the isthmus in the central harbour of Panormus. Originally discovered by Mr. Tito

Ὁ ΠΙΩΙΧΛΥ ΣΤΗΙΩ
 ΙΟΛΛΟΥΚΕΧΕΡΣΩΜΕΝΟΝ ΤΩΝΕΥΡΕΙ,
 ΑΙΤΗΣ ΛΙΜΝΗΣ ΕΚ ΤΩΝΙΔΙΩΝ ΑΠΟΚΑΤΑΣΤ
 ΑΣΑΔ ΛΠΑ ΝΚΑΙΤΑΠΕΡΙΕΧΟΝΤΑΝ ΛΑΥ
 ΣΙΤΕ... ΑΥΤΙ... ΚΑΙ ΤΩΙΤΟΥΥΙΟΥ ΒΑΣΙΛΕΥΣ
 ΟΙΜΗΤΑΛ ΚΑΙ ΤΟΥΚΟΤΥΟΣ ΚΑΙ ΤΩΝ ΛΔΕΛΦΩΝ ΥΤ
 ΑΣΙΛΕΩΣ ΠΟΝΤΟΥ ΠΟΛΕΜΩΝΟΣ ΚΑΙ ΚΟΤΥΟΣ Ο
 ΙΑΤΙ ΑΝΤΩΝΙΑ ΤΡΥΦΑΙΝΑ ΚΟΤΥ ΣΒΑΣΙΛΩΝ
 ΘΥΓΑΤΗΡ ΚΑΙ ΜΗΤΕΡΑΣ ΑΣΣΑ

Fig. 2

ΠΙΩΙΧΛΥ ΣΤΗΙΩ
 ΙΟΛΛΟΥΚΕΧΕΡΣΩΜΕΝΟΝ ΤΩΝΕΥΡΕΙ
 ΑΙΤΗΣ ΛΙΜΝΗΣ ΕΚ ΤΩΝΙΔΙΩΝ ΑΠΟΚΑΤΑΣΤ
 ΑΣΑΔ ΛΠΑ ΝΚΑΙΤΑΠΕΡΙΕΧΟΝΤΑΝ ΛΑΥ
 ΣΙΤΕ... ΑΥΤΙ... ΚΑΙ ΤΩΙΤΟΥΥΙΟΥ ΒΑΣΙΛΕΥΣ
 ΟΙΜΗΤΑΛ ΚΑΙ ΤΟΥΚΟΤΥΟΣ ΚΑΙ ΤΩΝ ΛΔΕΛΦΩΝ ΥΤ
 ΑΣΙΛΕΩΣ ΠΟΝΤΟΥ ΠΟΛΕΜΩΝΟΣ ΚΑΙ ΚΟΤΥΟΣ Ο
 ΙΑΤΙ ΑΝΤΩΝΙΑ ΤΡΥΦΑΙΝΑ ΚΟΤΥ ΣΒΑΣΙΛΩΝ
 ΘΥΓΑΤΗΡ ΚΑΙ ΜΗΤΕΡΑΣ ΑΣΣΑ

Fig. 3

Carabella of Constantinople, it was seen in January 1880 by Lolling, who published¹ such copies of the inscription as it was possible to obtain without cleaning away the lichen and carbonate of lime which covered many of the letters. These imperfect copies were recently discussed by Dr. Wilhelm² who had enquired for the stone at Constantinople and failed to discover its whereabouts. Last summer it was re-excavated by Mr. de Rustafjaell: we succeeded in removing the incrustation and obtained more complete readings.

The pedestal is of greyish marble and cylindrical in shape measuring about 9ft. 9in. in circumference. Mr. de Rustafjaell gives the total height as 5ft. 9in.: during our visit the amount of water in the low-lying ground made it impossible to re-excavate, and we were consequently unable to see the whole monument. The top is badly damaged, but in one place the mouldings which surrounded it (torus, fillet, and cavetto) are still existent.

The sides are divided symmetrically by four vertical tridents and adorned with clumsy high reliefs representing four half-galleys, dolphins, tunnies,³ and smaller fish, of which latter, again, I cannot speak at first hand.

On opposite sides of the pedestal, close under the mouldings, are the two dedicatory inscriptions, the one (Fig. 2) in prose, the other (Fig. 3) in elegiacs. Both are carved on oblong panels with triangular ansae at either end, and below each is a trident, the lines of the epigram being broken by the prongs, while the trident beneath the prose inscription stops short before reaching it. This difference, together with the fact that, while the panel of the prose inscription is in relief, that of the epigram is defined merely by incised lines, makes it probable that the latter was not part of the original design.

The panel of the prose inscription measures 0·75 × 0·32 metres, the ansae increasing the length to 0·97. The approximate dimensions of the panel of the epigram are 0·65 (extreme length 0·75) × 0·15 m.

The letters of the prose inscription are ·03 m. high in the first line, ·025 in the second, and decrease gradually to ·02 in the last line. Those of the epigram are smaller, averaging ·013 m.: there is a decrease in height at l. 5.

The forms are those normally used in early Imperial times (ΑΙΟΚΩ).

Ποσειδῶνι Ἰσθμίῳ χαριστήριον τὸ πρὸ
 πολλοῦ κεχερσωμένον τῶν εὐρείπων
 καὶ τῆς λίμνης ἐκ τῶν ιδίων ἀποκαταστῆ-
 σασα δαπανῶν καὶ τὰ περιέχοντα ἀναλώματι
 τῷ τε εἰσπρατῇ καὶ τῷ τοῦ υἱοῦ βασιλέως Θράκης 5
 Ῥοιμητάλκα(ι) τοῦ Κότυος καὶ τῶν ἀδελφῶν αὐτοῦ
 βασιλέως Πόντο(ν) Πολλέμωνος καὶ Κότυος ὁ(ν)ό-
 ματι Ἀντωνία Τρύφαινα Κότυος βασιλῆ(ω)ν [καὶ
 θυγάτηρ καὶ μήτηρ αὐτῆς] βασιλῆ(ω)σσα. 9

¹ *Anth. Mitth.* v. (1880), p. 390.

² *Arch. Epig. Mitth.* vi. (1897), p. 84.

³ Identified as such by peasants, and exactly

similar to representations on coins. *Brit. Mus. Catal., Mysia*, Pl. VII. 16.

'A thank offering to Poseidon of the Isthmus (dedicated) after the restoration of the long-choked portion of the channels and of the lagoon at her own charges, and of the surrounding (quays?) at the expense of herself and her son Rhometalces, King of Thrace, and in the name of his brothers, Polemo King of Pontus and Cotys, (by) Antonia Tryphaena, daughter and mother of kings, herself a queen.'

It is not worth while to reproduce Lolling's imperfect copy. Wilhelm's conjectural restorations, *τῆς λίμνης ἀποκαταστήσασα* and *εὐρείπων*, are proved correct.

The restoration of the dedication to Poseidon Isthmius appears certain. The epithet is hitherto unknown at Cyzicus, but obviously appropriate to the locality. Poseidon *Asphaleius* is probably to be restored in the dedicatory inscription of Bacchius cited below, and this may have been the title of the god as guardian of the outer harbour alluded to in the epigram. 'Ροιμη-τάλκα(ι) is an engraver's error, natural after the recurrence of *καί*.

Lolling's copy of the epigram, though in some points incorrect, preserves a good deal of the left side, which has since been almost entirely broken away. It runs as follows:

| | |
|---------------|---------------------------|
| ΕΙΑΙ | ΜΣΕΙΛΛ |
| ΛΑΛΛ | ΕΝΚΥΣΙΚΟΣΕΙΝΑΛΙΙ |
| ΠΟΛΛΑΚ/ | ΗΣΑΠΑΤΑΣΣΟΜΕΝΟΣΠΟΔΙ |
| ΕΙΣΟΤΕΔ | ΗΝΗΣΣΟΝΕΚΑΙΝΟΤΟΜΕ |
| ΚΑΙΒΥΘΟΣΕΥΡΕΙ | ΝΕΧΑΡΑΣΣΕΤΟΚΑΙΜΕΤΡΑΙΛΙΜΑ |
| ΕΥΡΟΜΕΝΗΠΟΝ | ΥΘΗΚΕΝΑΓΑΛΜΑΘΕΩΝ |
| ΣΟΙΤΟΣΟΝΕΙΜΓΑ | ΠΟΣΕΙΔΟΝΕΓΩΔΑΛΟΣΑΚΛΥΣΤΟΙΟ |
| ΣΤΗΣΟΜΑΙΕΥΡΕΙ | ΠΩΝΕΝΓΥΟΣΑΜΦΟΤΕΡΟΙ |

From a combination of the two we arrive at the following:

² ἔστ]ασεν α

Λᾶαν? Κύζικος εἰναλίη
Πολλακ ἡσα πατασσόμενος ποσὶ [δὴ ²]μῶν
Εἴσotte δ ἡ νῆσσον ἐκαινοτόμε[ι
Καὶ βυθὸς εὐρείπων ἐχαράσσετο καὶ με Τρ[ύ]φαινα 5
Εὐρομένη πόν[το]ν θῆκεν ἄγαλμα θεῶι
Σοὶ τὸ σὸν ἔρμα, Ποσειδόν, ἐγὼ δ' ἄλδος ἀκλύστοιο
Στήσομαι εὐρείπων ἔγγυος ἀμφοτέρων

The lacunae are still too great to admit of a convincing restoration. If, however, the readings *λᾶαν* and *εὐρομένη* can be relied on, the meaning may be that a stone, employed for instance as the threshold of a gate (*πατασσόμενος ποσὶ*), was discovered in the course of Tryphaena's reconstruction and by her orders carved into a statue and dedicated to Poseidon.

‘Till Tryphaena re-formed the island, defined the bed of the channels and finding me, set me here, a statue dedicated to the god of the sea.

“Do thou, Poseidon, (look to) thine own bulwark and I will vouch for the two channels of the surgeless sea.’

νησσον (l. 4) is a mis-spelling for *νησον*, possibly intentional, as Herodian commented on this spelling of the word,¹ and it occurs again in an inscription from Smyrna,² as well as in several manuscripts.³ There may be some play on the word *ἐκαινοτόμει* which generally, except in the technical use (= *λατομεῖν*), loses the sense of cutting entirely. There can hardly, I think, be a change of subject at *βυθός* (l. 5): the Thesaurus gives an Aeolic form *βίθος* for *βάθος*, but there may be nothing more than a slip in our inscription. *ἔρμα* (l. 7) is possibly used as a poetical equivalent of *χῶμα* ‘mole’ (cf. the Baechius inscription cited below) though there seems no exact parallel, the nearest being Suidas’ unsatisfactory quotation from an unknown author (s.v. *ἔρμα*—*ἔρματα μεγάλα ἔβαλεν εἰς τὸ στόμα τοῦ ὠκεανοῦ ὡς ἂν ἐμπόδια εἴη τοῖς ἐπιφοιτῶσι θηρίοις*): the word is regularly used of a reef of rocks: Suidas also gives *ἀσφάλισμα* (cf. the Homeric *ἔρμα πόληος*). The meaning given by Hesychius, ‘*περίφραγμα*,’ which might suit the epigram with the sense of ‘enclosed harbour’ seems to arise from a confusion with *ἔργμα*. We may suppose that there was a statue of Poseidon erected on the mole,⁴ and that this is addressed in the epigram. ‘*Ἄλως ἀκλύστοιο*,’ as I hope to show below, alludes to the land-locked waters of the *λίμνη*.

As to the statue to which the base belonged, the antithesis in line 8 shows that it cannot have represented Poseidon. Mr. Bosanquet suggests that a statue of the eponymous founder of the city would be appropriate; he is frequently represented on coins and we have a record of a statue in *C.I.G.* 3667; but the dedication and the ornaments on the pedestal seem to me more suitable for a marine personage. It may have been one of the minor sea deities, possibly a Triton, which occurs on Cyzicene coins of this date⁵; the upper surface of the monument is too much damaged to afford any clue, and the insignificance of a Triton gives a semi-humorous turn to his ambitious proposal to share the empire of Poseidon.

The queen Tryphaena who is mentioned in both the foregoing inscriptions as the restorer of the port of Cyzicus was till comparatively lately known only from coins.⁶ Her identity has since been established beyond doubt by several important inscriptions from Cyzicus which enable us to connect her with certain passages in the historians where she is not mentioned by name. She is now perhaps best known to English readers from Professor Ramsay’s brilliant chapter in *The Church in the Roman Empire* (p. 375 ff.) Her vaunted kinship with more than one royal house is explained by genealogical trees published by Mommsen⁷ and M. Théodore Reinach.⁸ The former adds the stemma of her husband Cotys, whose ancestors have since been discussed briefly by T. Reinach⁹ and at some length by Mr. Crow-

¹ Cramer, *Anecd. Graec. e codd. Bibl. Oxon.* vol. 3. p. 249.

² *C.I.G.* 3311; cf. also 3268, 3282 also from Smyrna, which adopt the same spelling in *Προκοπρησία*; and *J.H.S.* vii. (1886), 141 (from Lepisia).

³ e.g. Lycophr. i. 399.

⁴ As at Cenchreae, Imhoof-Blumer and Gardner, *Numismatic Commentary on Pausanias* Pl. D. lx.

⁵ *Brit. Mus. Catal.* Mysia, Pl. VII. 12.

⁶ Her head appears with that of her son Polemon II. on coins of Pontus (*Brit. Mus. Catal.* Bithynia. &c. Pl. X. 6), those of her husband Cotys and her son Rhometakes on certain Thracian pieces (*Brit. Mus. Catal.* Thrace, pp. 209-210).

⁷ *Eph. Epigr.* II. p. 262-3.

⁸ *Rev. des Et. Gr.* vi. (1893), p. 21.

foot,¹ Latyshev² gives the stemma of the kings of the Bosphorus. The earliest of these inscriptions, dating from Tiberius, tells us of her royal parentage and her close connection with the Imperial cult at Cyzicus. She was the daughter of Polemo I. King of Pontus and of Pythodoris, grand-daughter of Mark Antony: the latter seems to have been a most capable woman, and, after the deaths of Polemo and her second husband Archelaus King of Cappadocia, continued to rule in person certain territories of Pontus.³ Tryphaena's connection through Antony with the house of the reigning Caesar doubtless made her a particularly acceptable priestess for the newly associated cults of Livia and Athene Polias.

We have too a second inscription,⁴ dating, like that under discussion, from the early years of the reign of Caligula, and filled with extravagant adulation of the young monarch in whom centred for the time the hopes and affections of the Roman world; here Tryphaena appears as a widowed queen, taking official part, with her three royal sons, in the games of the 'New Aphrodite' Drusilla, the deified sister of their benefactor Caligula.

The history of the interval we know from Strabo,⁵ Dion,⁶ and Tacitus,⁷ none of whom mentions Tryphaena by name. She was married to Cotys king of Thrace, a loyal vassal of Rome, who was oppressed and finally murdered by his uncle and partner in the kingdom Rhescuporis. The widow appealed to Rome, and the murderer was banished, the kingdom being divided and placed under Roman supervision during the minority of Tryphaena's sons, who were meanwhile brought up at the court of Tiberius. Caligula soon after his accession appointed the three companions of his youth each to a vassal kingdom within the empire—Rhoemetaces, the eldest, to his father's Thracian dominions, Polemo to Pontus, the kingdom of his grandfather, and Cotys to the throne of Lesser Armenia.

It seems significant that Tryphaena, proud as she was of her royal ancestry and royal offspring,⁸ should omit all mention of the elevation of Cotys. We can only surmise that though her three sons were solemnly proclaimed at the same time, the two elder assumed their titles some months at least earlier than the younger. As the harbour works of Tryphaena appear to have been completed in the reign of Caligula, we may date our inscriptions between his accession (37) and the proclamation of the kings (38).

The reasons for Tryphaena's connection with Cyzicus are not at first sight obvious. That a similar connection between the powerful mercantile

¹ *J.H.S.* 1897, p. 321.

² *Inscr. Ant. Orae Septentr. Ponti Eur.* ii. p. xlv.

³ Strabo xii. 3. 29 (p. 555).

⁴ *Monatsb. Kön. Akad. Berlin*, 1874, p. 7 (Curtius). The second decree appears also in Dittenberger, *Syll.*² 365.

⁵ Strabo xii. 3. 29.

⁶ Dio Cass. lix. 12.

⁷ Tac. *Ann.* ii. 64 ff.

⁸ In Dittenberger *Syll.*² 365, Tryphaena is styled βασιλέωι μὲν μήτηρ, βασιλέων δὲ θυγάτηρ, and a similar formula seems to be the solution of two more lines in the fragmentary inscription restored as far as the name of Tryphaena by Dr. Mordtmann (*Dth. Mitth.* vi. 40), βασιλῆος Σησῆος Ἀντωνίας Τρυφαίνης ΒΑΣΙΛΕΩΝ ΘΥΓΑΤΡΟΣ | καὶ ΜΗΤΡΟΣ.

town and the ephemeral princes of Thrace had existed in former times seems likely from Appian's¹ account of another widow of a murdered Thracian kinglet, Polemocratia, who sent her son to be brought up out of harm's way at Cyzicus. The Thracians and Cyzicenes had a certain amount of legendary connection, the hero Cyzicus himself being, according to some accounts,² a son or grandson of Eusorus, King of Thrace. This may have afforded a sentimental bond such as existed on equally slender grounds between Ilium and Rome: but we have seen that Tryphaena's connection dates from before her marriage with the Thracian Cotys. The material advantages of the connection are more apparent. Cotys appears in history as a consistent ally of Rome,³ Tryphaena, a descendant of Antony, and consequently a cousin of Caligula, showed an obsequious devotion to the Imperial house which is emphasised by the inscriptions, and evidenced by her officiating as priestess in the combined cult of Livia and Athene Polias,⁴ and later in that of Drusilla.⁵ This prominent philo-Roman tendency would make the position of the royal house precarious among the half savage and naturally independent Thracian tribes, and Cyzicus was both powerful and near enough to make it a convenient refuge. The Cyzicenes on their part benefited by the munificence of the widowed queen, and doubtless also by her influence with the Roman authorities. How great this influence was is attested in the curious 'Acts of Paul and Thekla,' discussed by Ramsay in his *Church in the Roman Empire*,⁶ where 'Queen Tryphaena' secures the release of Thekla merely by her prestige as a relation of the imperial house. In his analysis Ramsay decides that the legend can supply several new facts for the history of Tryphaena, besides confirming our ideas of her important position in Asia, during the reigns of her kinsmen Caligula and Claudius.

The works of Tryphaena at Cyzicus appear to have been undertaken on a grand scale. Foreign labour was imported, the city was 'restored' (we have unfortunately no details) and the port, crippled by the blocking of the *εὐρεῖποι* during a war scare,⁷ was opened once more to commerce in the peaceful times which followed the accession of the new emperor.⁸

Further light is thrown on the extent of the harbour improvements by a votive inscription of one Bacchius,⁹ who superintended the 'excavation of

¹ App. *Bell. Civil.* iv. 75.

² Hyginus *Fab.* xvi. Schol. Apoll. Rh. i. 948.

³ Tacitus *Ann.* 3, 64.

⁴ *Monatsber. Preuss. Akad.* 1874, p. 7, iii.

⁵ *Monatsber. Preuss. Akad.* 1874, p. 7, iv. (Dittenberger² 366).

⁶ P. 375 ff.

⁷ M. Th. Reinach (*Rev. des Ét. Gr.* vii. (1894) p. 50) suggests that the Thracian risings of Tiberius' reign (21-26 A.D.) were the cause. The word used (*συγχωσθέντα*) shows that the

passage was deliberately blocked, and subsequent neglect would account for the 'silting up.'

⁸ *Ath. Mitt.* xvi (1891), p. 141; *Rev. des Ét. Gr.* (1893), p. 8, ib. vii. (1894) 45; Dittenberger, *Syll.*² 366.

⁹ *Bull. Corr. Hell.* xvii. (1893), p. 453, *Rev. des Ét. Gr.* 1894, p. 45. Dittenberger, *Syll.*² 543.

Curtius (*Monatsber. Kön. Acad. Berlin*, 1874, p. 4) publishes a funeral inscription of 'Maecandria, wife of Bacchius,' who left her native land

the harbours and the lagoon and the canals and the rebuilding of the protecting moles'¹. (ὄρυχῇ τῶν λιμένων καὶ τῆς λίμνης καὶ τῶν διωρύγων καὶ τῆς ἐποικοδομίας τῶν προκειμένων χωμάτων). Here again we have a λίμνη and canals (almost certainly the εὐρεῖποι of our inscription). Thus from two inscriptions we know that a λίμνη and canals were dredged, and the re-opening of the canals is mentioned in a third: all these inscriptions are of the same period.

In late authors² we hear of two harbours at Cyzicus, one of which (Panormus) is called 'the harbour of Cyzicus' and had *entrances on both sides*. It was presumably natural, as the other is expressly called ὁ μὴ αὐτοφυῆς ὢν.

Any one who has been on the site will, I think, be convinced with Judeich³ that the topographical evidence contradicts the theory of Th. Reinach⁴ (based chiefly on a passage in Scylax⁵ mentioning the isthmus) that the Arctonnesus was originally a peninsula. In support of the generally accepted testimony of Apollonius Rhodius,⁶ Strabo,⁷ and Pliny,⁸ the low-lying neck connecting the hills of the mainland with that on which Cyzicus once stood has every appearance of a recent formation. East and west it is bounded by low banks of sand, inside of which the whole isthmus is occupied by a reedy swamp sharply contrasting with the fertile slopes which rise behind the line of the southern walls. Its general extent and the nature of the isthmus are well shown in the map made by MM. Perrot and Guillaume in 1861 and published the following year in their 'Exploration archéologique de la Galatie,' &c.⁹ At the time of our visit the swamp was partially submerged, there were small pools only a few yards from the basis itself, and the south-east corner of the isthmus was a large sheet of water: in Hamilton's time¹⁰ the moat outside the southern walls was also filled, even in May, so the land of the isthmus is apparently still forming.

We can, then, easily imagine in Classical times a lagoon (the λίμνη of the inscription), occupying the marsh-land of to-day, and containing sufficient depth of water for the accommodation of shipping. The importance of this harbour for commerce, if provided with communication east and west, as well as its extent, justifies us in considering it *the* harbour of Cyzicus. That such communication existed we have seen by inscriptions: Pococke¹¹ and Hamilton¹² also noted what seemed to them to be traces of canals on the east side, though,

(Asiatic, if we may judge by her name) to accompany her husband to Cyzicus. If the Barchius of this inscription is identical with the architect it would seem that he was one of the foreign workmen mentioned in Dittenberger, 366.

¹ As to the moles Dr. Makrys (Σύλλογος, 18, p. 29) mentions existing traces of two moles on the west side of the isthmus, and remains of another were shown me on the east side by Mr. de Rustatjaell. These may have protected the entrances to the closed harbours mentioned by Strabo, xii. 8. 11.

² *Etym. Mag.* s.vv. χυσιῶς λιμένι, Ἀμφίδυμος, Schol. Ap. Rh. i. 901.

³ *Sitzb. Berl. Akad.* (1898), ii. 551.

⁴ *Rev. des Et. Gr.* vii. (1894), 48.

⁵ *Geogr. Min.* i. 68.

⁶ *Argonautica* i. 936.

⁷ xii. 8. 11.

⁸ *N.H.* v. 32.

⁹ Vol. ii. Pl. III.

¹⁰ *Asia Minor* (1842), ii. 102.

¹¹ *Description of the East* (1745), Vol. ii. Pt. ii., 115.

¹² *Asia Minor* ii. 102.

owing to the shifting of the sandy banks. such appearances are notoriously deceptive. The remains of the moles however, if these may be connected with the entrances of the great harbour, afford more tangible evidence. Our basis stands at the north-west corner of a rectangular recess some 200 yards long, where the southern walls fall back about the centre of the isthmus. This recess MM. Perrot and Guillaume mark conjecturally as a 'port': its level is that of the marsh, and the path leading from the north drops abruptly some fifteen or twenty feet immediately before reaching Tryphaena's monument. The inscriptions warrant us in supposing that this port stood in some immediate relation with the great harbour and the canals, otherwise their position is inappropriate. I suppose, then, that the port formed a northern extension of the $\lambda/\mu\nu\eta$ and was surrounded on the three sides which are formed by the city wall by quays for the disembarcation of merchandise; for this its central situation rendered it particularly convenient. It may be these quays, I would suggest, which are vaguely alluded to by the περιέχοντα of the inscription.

F. W. HASLUCK.

SEMATOGRAPHY OF THE GREEK PAPYRI¹

THE conclusions stated in the following pages are based upon the examination of the Greek documents of about three hundred papyri, the large majority belonging to the British Museum. For reference to authorities, I have principally used the following: Kenyon, *Greek Papyri in the British Museum*; Mahaffy, *On the Flinders Petrie Papyri*, 1891, 1893; Grenfell, Hunt, and Hogarth, *Fayum Towns and their Papyri*; Grenfell and Hunt, *The Oxyrhynchus Papyri I. and II.*, 1898, 1899. Also the facsimiles and lists published by Schow, Karabacek, Wessely, Thompson, Montfaucon (Book V. of the *Pal. Graec.*) Wilcken (*Observationes ad Historiam Aegypti Prov. Rom. depromptae e pap. Berol. ined.* 1885); as well as other works by the authors above-named, viz., Kenyon, *Class. Texts*, &c.; Grenfell and Hunt, *Gk. Pap. Ser. I. and II.*; *Rev. Laws of Ptol. Phil.*; and lastly the ostrakon-literature dealing with the same symbols, especially Wilcken's many publications (esp. *Griech. Ostraka*, 1899); Revillout and Wilcken in *Rev. Egypt.*; Birch and Sayce in *Proc. Soc. Bibl. Arch.* To Dr. Kenyon I owe also the hearty expression of my indebtedness for very helpful counsel in the prosecution of these and other researches and the publication of their results. Further as an Editor of this *Journal*, he has read my manuscript, and as he has kindly given me the benefit of that reading privately, I have been enabled to reconsider certain of my statements, and diminish by so much the labours of subsequent criticism. To Mr. G. F. Hill also I am indebted for some important observations.

The general thesis which has to be maintained and illustrated herein is the following. The symbols or compendious representations of commonly recurring expressions are the results of a quite natural process, analogous to the process by which the epigraphic capitals were rounded into uncials, and these still more in the cursive hands.² The cursive not gaining in its full alphabetic representation sufficient brevity to satisfy the scribe, to whom the repetition *in extenso* of obvious words sometimes became, no doubt, insufferable, was soon abbreviated by the omission of parts of words, an inclusion-mark being drawn over the letters which made up the

¹ The lack of uniformity in the representation of the signs in the following pages is to be explained by the fact that printer's types have been used wherever possible, while blocks have been cut for the rest.

² Apart from these, there is a small group of characters whose origin is older than the papyri. These in some cases are epigraphic forms retained, but others may have had a manuscript origin.

abbreviation, or an apostrophe (of which our own is a diminutive descendant) taking the place of those which were omitted. Next, in certain very common names (of money, measures, etc.), these parts of words were simplified in form, the barest outline or fragment remaining—a natural order of development, like that of the oldest alphabetic capital from the more complex hieroglyph. Succeeding generations adopted these forms in a mechanical way, and soon they appear as quite irrational symbols. But the process was applied only as the need was felt, so that we find some overlapping and rivalry of various forms, and but a small number of true symbols, probably not a hundred, even including the ordinary numerals and the signs or marks of reference, paragraphs, total, etc. Many papyri have no symbols at all, not even in dates and equally obvious places.

On the other hand the practice of natural abbreviation, by omission of the latter parts of words, is overwhelmingly more common than in any modern writing and printing.¹ The Greek scribes of all the earlier papyri relied on the perspicacity of the reader's intelligence, and abbreviated so much that in some places little more than half the full number of letters are recorded. The mark of abbreviation—a horizontal, or a (normally) vertical stroke—and compendious scribbles of the end syllables (*e.g.* B.M. Pap. xcix. (1) 31 et passim) of a common or recurring word were together almost sufficient for all the demands that were made, and in the end saved far more space and labour than elaborated systems of abbreviation, both shorthand and other, have done for modern printing or manuscript. As regards formal systems of abbreviation, it may be observed that any method of reducing labour and time in writing, to be of actual, as opposed to potential usefulness, must proceed quite naturally, only one step at a time, each step being in every way just that which hand and mind expect, in advance of the stage of abbreviation already reached. Having *καί*, it is easy to write Kappa with a flourish, while only the most rigid watchfulness at first will attain the habit of introducing an extraneous sign. Here the good sense of the ancient Greek-speaking people showed itself, and it is surprising to observe how little the later Greek copyists gained by the elaborate abbreviation and use of signs which they affected, how much more ornamental than useful were many of the compendia which later still were copied in printers' type, and how often they seem to choose quite the wrong groups (tested by the ancient practice) for the application of their abbreviations.² Be that as it may, allowing for the general ancient tendency, we shall not expect to find any carefulness on the part of the scribes of the papyri to introduce unmistakeable symbols, much less to invent them, and must be prepared to find the whole of a formula, made up of abbreviated words written in the cursive hand of


¹ It is surprising that hundreds of common words have not been forced into abbreviated form in modern English. As for perspicuity, who could possibly mistake the meanings of *wh.*, *c^d*, *w^d*, etc., in any context? As regards economy the mere saving in type, time, and

space would be enormous.

² Cp. the habit of Mediaeval writers of Tironian notes, who supplied signs for word-endings where the ancients had left the *notae* abbreviated.

one generation, appearing as the symbol of the next. It will follow as a corollary, that there will be no borrowings from formal tachygraphy in the papyri. As a matter of knowledge gained by a laborious search through nearly the whole of the published papyri, and the study *ad hoc* of the hands themselves of nearly three hundred manuscripts, I can assert that there is hardly a single indubitable occurrence of a borrowed tachygraphic sign in use in ordinary Greek literary,¹ or non-literary² papyri, and, as I hope these pages will demonstrate, there is *only a very small number of symbols which do occur, which cannot be traced to a cursive origin or, in some few cases, back to epigraphic characters.*

Concerning one of those irreconcilable symbols there is an interesting and important observation to be made. The T-shaped drachma-symbol, one of the chief symbols of the papyri, appears in the oldest Petrie papyri.³ This fact is interesting to the student of symbols for its own sake, since it follows that if it had, like the rest, an alphabetic or an epigraphic origin, it must be *older than all the papyri.* But its general importance in palaeography is still greater, as it would confirm the more recent opinions of scholars (vide Thompson, *Gk. and Lat. Pal.* p. 115; Kenyon, *Pal. of Gk. Pap.* p. 9) that Gk. cursive writing has a long history behind the earliest facts yet known to us from any manuscript. It is not that the symbol is merely puzzling, like the equally early ρΑ-symbol for 'holder of one hundred arouras' in Pet. Pap. XI., for in such a case the explanation may lie in some fact of *contemporary* social history at first overlooked by the investigator. But the clear and bold outline, and its uncompromising contrast with the contemporary cursive (cp. Pet. Pap. XII. and XIII. fr. 2 of the reigns of the second and third Ptolemies) point to a matured development, possibly coeval with the use of the drachma itself, so carrying back our glance well into the classical period.

Another observation of general value, not only to palaeography, but even to archaeology, is that symbols are the safest depositories of the oldest forms. The numerals Stigma=6, Sampi=900, Sigma of the epigraphic shape=200, Koppa=90; the series formed of special use of Alpha, Beta, etc.=1000, 2000, etc.; the curve, a degenerate Mu=10,000: these keep their ancient forms and meanings through centuries of palaeographical change. The epigraphic Sigma, in that brief form  which already appears even in the inscriptions themselves (at least in the Chalcidian alphabets of Euboea and her colonies) survives, as I shall endeavour to show, in the

¹ Concerning the nature of the abbreviation used in the 'Αθηναίων Πολιτεία of the British Museum, and two or three others like it, which stand apart from the ordinary literary papyri written in careful uncials, judgment may be at this stage wisely suspended. See Gitlbauer, *Tachygraphische Spuren im Papyrus der aristotelischen 'Αθηναίων Πολιτεία*, in the *Archiv*



für Stenographie July-Dec. 1901. In this learned contribution the 'special pleading' for formal tachygraphy is undisguised. I attempt a less *ex parte* estimate in a forthcoming contribution. See note at end, p. 173.


² For a doubtful exception, vide *infra* p. 148.

³ And also in Attic inscriptions from the fifth century B.C. onwards.

departures from the ordinary script, through its more cursive developments, to the stage of the quite arbitrary symbol. Consequently, the distinction between symbols, and the nearest similar formations of the common characters, will be psychological, as well as formal. The enquiry to be made at each stage is, How far had the scribe in mind, at the time of writing, the original true form of the symbol, or, in the case of the composite symbols, the elements composing it? This has no direct relation with his possible knowledge of such origin. For illustration, the scribe who wrote in Brit. Mus. Pap. CCCCII. 31 the large 2-shaped character for the number 1000, must almost certainly have known that it was a circumflexed Alpha, yet if it is not, according to his ordinary hand, a plain Alpha surmounted by a circumflex, which he feels he is writing, then the character is already in one of the early stages of a symbol; just as an Englishman in writing £ for 'pounds' is writing a common symbol, although he may be well aware that it is L crossed with two bars. One sign of such feeling is that the scribe deviates as little as possible from the conventional form of the symbol-letter; and thus it comes to pass often that an alphabetic letter used as a symbol appears as quite another thing, when compared with the corresponding letters of the manuscript in which it occurs.

In order to maintain the first-stated position that the symbols of Ptolemaic papyri are not arbitrary, it will be necessary to examine in detail every symbol occurring, or as many of them as are capable of explanation; and then to show that these are sufficient for the purposes of the inductive argument.

The Metretes-symbol . This is demonstrably a monogram for Mu-Epsilon. The abbreviation which sometimes takes its place is printed by the editors as two letters without comment, but for our present argument there is to be observed a curious distinction between the monogram-symbol, and the ordinary collocation. The difference may be studied in Brit. Mus. Pap. XVII. (B.C. 162). where in lines 38, 46, *et passim*, Mu-Epsilon occurs as a syllable in ordinary words, and it will be seen that in every case the right-hand perpendicular curve of the Mu is present, as well as the bow of the Epsilon; whereas in the Metretes-symbol (41 and 39) the Mu is reduced to an undulating line; or, to put the same fact differently, the Epsilon is reduced to two horizontal bars written against a cursive Mu, thus .

In line 58 there occurs the symbol, in which we may trace the Mu, with its horizontal bar made straight; in line 57 we have a mutilated form of the same, and finally, in lines 51 and 54 occur two of the familiar symbols, as variants of the monogram (cp. Pap. XV. fr. 8 line 9), one in which the lower curve of the Epsilon still lingers, and one of the ultra-conventional type. The circumstances that this MS. is an official document, that it is written by three hands, each of which gives the same testimony, that it is clearly dated and in good condition, add peculiar reliability to its witness. For the formation we may compare that of *τέ(τακται)* viz, . B. M. Pap. DCLXXV. 101 B.C. and that of the symbol for *κεράμιον*, κ (vid. p. 144 infra).

The common symbol /, ϐ = 'total.' Scholars have long recognised¹ the identity of this symbol with the initial letter of *γίνεται* (-ονται): B.M. Pap. XVIII. contains a pretty demonstration of the fact, as follows:

line 4: *γίνονται ολυρων αρταβας νς'*

line 18: *ϐ ολυρων αρταβας νς̄*

line 16: */ ολυρων ρταβας λε*

cp. ib. verso line 2: B. M. Papp. XXIX. 4; XXX. 7, 13, 15, 21; III. 36, 43; Fay. Pap. XIV. 5.

The group of symbols ϣ, ϣ, ϣ, ϣ. These prove one another. Beginning with ϣ = 'the city' which we find in B.M. Papp. LI. (A) and III. and Pet. Pap. II. no. XXVIII. passim,² we see, on close examination, that the dot was in each case written as an Omikron, as distinguished from the diacritic *punctum* (which is very rare in Greek cursive of this period; in a circumflexed Delta, B.M. Pap. L. 14, there is perhaps an instance). In the first instance, the symbol occurs almost isolated, owing to the mutilation of the papyrus, but there is little doubt of the reading (Kenyon). The top part of the curve has been scratched, and so flattened; the Omikron within it is reduced to a tiny cup still quite as large as the common Omikron of that shape.³ In the second (Pap. III. 37) the reading is more certain, and here the dot beneath the curve is actually in the MS. as large as that which represents the Omikron of the preceding word. This slight indication helps to fortify the reasonable assumption that we have in the curve of the symbol a Pi, worn down from its angular shape by its frequent use as a symbol, exactly into the shape assumed by the Pi in ordinary writing in Roman, and occasionally earlier, cursive alphabets. As additional corroboration, there is the analogous later use of the Pi, with Omikron within it (= *ποίημα* Pap. CXXI. 385; and = *ποιητής* in the Bankes Homer). The symbol then is the time-worn initial of *πόλις* (or a case) with the second letter written subscript.

The symbol ϣ = *πήχεις* is written over and enclosing the alphabetic numerals, which give the number of *πήχεις*. It is only a variant use of Pi, its significance being given by its position. Its shape is seldom a perfect semicircle, more often resembling an angular cursive Pi of third cent. MSS. Cp. Pap. XV. 5, 7, 17, 18. I cannot find it in the Petrie Papyri, and it is also apparently absent from the Ostraka: cp. Wilcken Gr. Ostr. I. 818-9.

A similar explanation applies to the symbol for 'remainder': ϣ = *περίεστι*. This is sometimes identical in shape with the foregoing, though always standing by itself and detached from the numerals of the remainder.

¹ Wilcken mentions it, in his *Dissertatio ad summum honorem* written in 1885. Dr. Kenyon gave it to me last year as the accepted opinion, so that it has survived a long period of criticism.

² Once in this papyrus followed closely by *με=μεγάλη* (?), apparently the metropolis,

Crocodilopolis (Mahaffy II p. (87). M. elsewhere quotes *εκ κροκοδιλων* ϣ from the heading of an account dated 20th year of Ptolemy III (226. B.C.).

³ Cp. Fay. Pap. XVII. 1. Here, however, it is further distinguished by the ordinary horizontal inclusion-sign.

In other places it is a more fragmentary part of the semicircle, pitched obliquely towards the right, or even thrown right over into the vertical, in that reminding one of the variations of Sigma toward the end of the first cent. and at the beginning of the second (Kenyon, *Pal. Greek Pap.* pp. 44, 45). It need hardly be regarded as a variant, the increased carelessness of formation being in proportion to the greater frequency of employment, and to the more certain corrective of a familiar formula. Cp. *Pap. XXX.* 3, 24, 25. It is found in Roman papp. *e.g.* *Fay. Pap.* *Cl. r.* (iii.) 4; *ib.* v. (i.) 10. Professor Mahaffy gives it this value (= 'remainder') in the *Petrie Papyri*, with the remark that he does not know its origin (*Part II.* p. 39).

The origin of $\int = \alpha\rho\tau\acute{\alpha}\beta\eta$ is sufficiently obvious. It occurs, apparently, only in the Ptolemaic documents, where there is no instance, I think, of the common Roman equivalent, the horizontal line with an Omikron or dot under it. In *B.M. Pap. XXIII.* we may study the construction of the symbol (second cent. B.C.). The scribe of this MS. had in his mind an abbreviation as nearly like a third cent. B.C. ligatured cursive¹ Alpha-Rho (cp. *Pal. Soc. II.* 143) surmounted by the horizontal abbreviation-mark² as a symbol could well be; in line 48 it is somewhat obliterated, but the portions of letters would make up Alpha-Rho; in line 49 is a variant of the same; in line 71 the cursive is perfectly distinct, as it is in line 72. A curious variant occurs, an isolated example, in *CCXVIII.*, fourth or third cent. B.C. (?). If anywhere the horizontal can be found unmistakeably attached to the Alpha, we have this very typical symbol-development: $(\alpha\bar{\rho}) - \int - \int - \int$.

Exactly similar is the formation of the symbol for Aroura, a simplified Alpha-Rho, \int , written without the circumflex which distinguishes the Artabe-symbol. It occurs very rarely, in this particular form, (*B.M. Pap. CCCII.* r., 5, 9, middle of second cent. B.C.), but its features may be seen in those of its descendants the two variant Roman Aroura-symbols. (See

¹ The Revenue Papyrus, of this century, has $\alpha/$, $\alpha\rho$, and $\alpha\bar{\rho}$ as common abbreviations for Artabas. The *Petrie Papyri* have a conventional form \int .

² This horizontal-mark, which is found in the oldest manuscripts and onwards, probably indicates originally not so much the omission of the absent letters as the inclusion of all the letters which it covers in a compound with a special meaning. This would be necessitated by the habit of continuous writing, without division of words, etc. The reader is warned by an over-written horizontal to look for some special meaning in the included letters, which otherwise being taken in conjunction with the letters of the context might accidentally make new meanings with them. This sign contri-

butes to the formation of a system of expressing fractions, which is commonly employed, but it would seem to be of general rather than particular use, as fractions are sometimes expressed in quite another way, viz by drawing a vertical stroke to stand directly over each member. In *B.M. CCXXIII.* (second cent. B.C.) we have this marking for one-eighth, one-sixteenth, and one-thirty-second, the one-eighth again in lines 6, 13, while (a less certain reading) *CCCH.* 5 has other fractions which appear as vertical strokes with a formless thickening at top and bottom. It is seen again in the common 'one-quarter' symbol (p. 147 *infra*) and probably, reduced in size, in the Roman forms of 4-chaler (*CCCLX.* (A.D. 191) lines 2, 3, 4, 5 *CCXII.* (A.D. 147) line 7), 'one per cent. and two per cent' (*CCCVII.* 2).

pp. 162 *sqq. infra*).¹ It is exactly similar in shape to the cursive Alpha-Iota which is freely used in the same period (*e.g.* CCCII. v., 12, 18), an identity inevitably resulting from neglect to form the loop of the Rho in this cursive syllable, ligatured. and of the third or second century B.C.

A very interesting Ptolemaic variant of this Aroua-symbol is found as a part of a composite symbol occurring Pet. Pap. XI., 13, 18, 21, and in O., 7, III. (in Professor Mahaffy's own collection). The whole compound ρϺ is a part of the personal description of persons mentioned in a document, and being associated in one of the documents just mentioned (XI.) with the names of soldiers, was put down at first by Professor Mahaffy (Part I. p. (35)) as an ideograph of a soldier's helmet preceded by the numeral Rho, and so making a symbol for *ἐκατόνταρχος*. But there is more than the simple fact in the observation, that this has also had to be cast aside along with other explanations of a non-alphabetic origin for symbols, and Mahaffy (in the palaeographical notes on Pt. I. in Part II. of the memoir), accepts Wilcken's explanation of the second portion of the collocation as *merely the primitive form of the well-known sign for Aroua*. The whole thus means 'hundred-acre men,' and W. cites from an unpublished document even *εἰκοσιπεντάρουροι* as strictly analogous. The same occurs Fay. Pap. XXIII. (i) 12: κε Ϻ

Cognate with the foregoing is the superscript hook Ϻ, signifying, with a Chi, the word *χαίρειν*. In Pap. XV. where it occurs (fr. 13), the regular formation of the Alpha as an ordinary letter is of a kind not noticed in

Sir E. Thompson's table of Greek Cursive Alphabets, viz. Ϻ, which does

not even remotely suggest the Alpha of this hook, so that at least to this scribe (*circa* 131–0 B.C.) the hook was no longer alphabetic, but merely a convenient symbol. The variants are noteworthy: see CCCII. v., 12, 18, 21, 22 and CCCCI., 25, 26, 27.

The same angle-shaped Alpha forms the abbreviating hook in Tra(pezites) (Pap. III., 43); and in Cha(lcus); its occurrence in the same line with *χαίρειν* in Pap. XV. is a case of mutual corroboration.

There is a large group of symbols whose formation is clear at a glance, so obviously are they cursively written words or parts of words, which are yet consciously and habitually written as something different from the same characters in the context. Of this kind is the cursive word *ἀνά* in B.M. Pap. XV., fr. 6, line 5. In fr. 8, line 9, it is so extremely cursive, though unabbreviated, that it is only one step removed from a symbol.²

¹ Cp. also Wilcken, Gr. Ostr. i. p. 819 for Ϻ = ᾑ (Alpha surmounted by Upsilon. W.'s own explanation) in the ostraca. Revillout, *Lettres sur les monnaies Égyptiennes*, 1895, gives (pp. 172, 3) a slightly different conventional form Ϻ which he thinks to be Alpha-Rho, with the over-written bar. It occurs naturally in

Ptolemaic cursive. The somewhat injured example B.M. XV. (6), 5 is most like W.'s.

² In one place at least, Pap. XV, fr. 8, line 2 *αῦ* is used not meaning *ἀνά*, but something like the *σικάνιον* or *δψώνιον* of items in the context since it is worth *ττ* dr., a meaning necessary to make the total given. But note that this is

The example in CCCII. r., 5 is noteworthy not only for this word alone, but in the study of abbreviation in early papyri generally. The final Alpha is detached and over-written, though obviously it would have been easier to write it continuously. This is done in other short words, *e.g.* $\delta\acute{\iota}\alpha$ (in the Roman papyri, at least) where there is *no* abbreviation of the word. A decisive example of this tendency to economy in space merely is to be seen in $\mu\chi = \mu\alpha\chi(\alpha\iota\rho\alpha)$, $\nu\lambda\alpha\varsigma = \nu\alpha\lambda\alpha\varsigma$, and other words in UCCCH. v., B.C. 152 or 141, *e.g.* 11, 12, 13, 16, 18.

Apart from occurrences of very cursive and somewhat contorted forms of the word, $\overline{\alpha}$ is the general symbol. Here we must see a mutilated cursive Alpha-Nu surmounted by a bar, perhaps the common bracketing or abbreviating sign, but more probably a reminiscence of the superscript Alpha just explained. The single horizontal and the angular Alpha occur CCCII. r. (lines 5 and 11), but it is not clear that the *meaning* in this place is $\acute{\alpha}\nu\acute{\alpha}$ (Kenyon, *Cat. Gl. P.* p. 10) though the signification of the components, viz. Alpha-Nu with a superscript Alpha, is beyond question. The general significance of a superscript final letter would lead one to deny the simple meaning to this collocation, were it not that, in addition to the case of $\delta\acute{\iota}\alpha$ above instanced, there is the actual occurrence of the symbol, meaning certainly $\acute{\alpha}\nu\acute{\alpha}$, elsewhere (*e.g.* = 'at the rate of' in Pap. CXCH. 5, etc.).¹

To this class of symbol-like collocations or compounds belongs the series

α , β , γ , δ , etc. = 1,000, 2,000, 3,000, 4,000, etc., resp. This series well illustrates the passage of suitable cursive forms into new symbols, even when the ordinary contraction is sufficiently brief. Alpha with a circumflex is already a satisfactory symbol for 'one thousand' and it is ordinarily not the practice to link circumflexes to numerals, yet in this series the linking is invariable, and the whole character then begins to assume strange and capricious forms.² B.M. Pap. XXIV. (lines 8 and 20) and CCCII. v. (line 31) have examples of this circumflexed Alpha. We have the simple Alpha (of that peculiar form which has the projecting arm pointing upwards to the right (*e.g.* *ib.* 30 and CCCII. v. *passim*) surmounted by a circumflex already an integral part³ of the symbol. Cp. Delta = 4,000 in B.M. Pap. L 14 resembling the figure 8 with a dot in the upper circle; a similar Delta in Pap. XV. fr. 6, without the dot; another Alpha, in fr. 5, line 6; Beta in Pap. XXIX. lines 3, 6; *ib.* verso 6, 7, Delta in Pap. XXIX. 4, *ib.* verso 3,

(1) not the common form of the superscript Nu; (2) not the ordinary $\acute{\alpha}\nu\acute{\alpha}$ of the same MS. *e.g.* line 1 α . Variants in fr. 13: CCCII. r. line 5.

¹ Mahaffy explains a repeated occurrence, all down a column, of the fully written word $\acute{\alpha}\nu\acute{\alpha}$ as equivalent to our \times ('multiplied by') thus: $\epsilon\alpha\alpha\delta\alpha$ $\xi\xi\alpha$ where the arithmetic ($15 \times 4\frac{1}{2} = 67\frac{1}{2}$) supports that meaning. Vide fac. of Petrie Pap. II, XXX. Of course this is almost the same thing as 'at the rate of.'

² Wilcken cites and illustrates a number in the second part of his *Observationes ad historiam Aegypti...depromptae e papyris Graecis Berolinensibus ineditis*, 1885. But the instances seem to be drawn from Paris Papyri.

³ That is to say, for instance, the scribe of Pap. Par. no. 66 in writing α or the scribe of β (for Gamma circumflexed) is not writing these peculiar forms as he would write the same letters in the context, even if he afterwards intended to add a circumflex.

and another Alpha in fr. 6, line 8, which is certainly there an irrational symbol, with the usual meaning. Cp. also Pap. XV. fr. 6, line 8; *ib.* 9; CCCCII. v. lines 10, 27. These instances are adduced to illustrate the use of a cursive ligatured form written in a fixed form with a regularity which marks it as a symbol, as contrasted with ordinary occurrences of the same letters cursive in the context.

The symbol for 'talents,' a horizontal resting upon a Lambda-shaped character, can immediately, on the analogy of the artaba-sign and its cognates, be resolved into the ligatured Tau-Alpha. The proof of this, however, is inferential, and not documentary, for those instances of its occurrence in Ptolemaic cursive, whenever they are not of the common form, are still more decidedly symbol-like; cp. Pap. XV. fr. 8, lines 2, 3, where the symbol is written by drawing the pen backwards and downwards from the right end of the horizontal to the left foot of the curve. The appearance of the symbol, and the presumption in favour of Tau-Alpha, tempts one to look for a sort of monogram, formed of capitals; but this cannot be defended by any analogous formation. On the other hand the simple collocation of the earliest known cursive Tau without a right hand member, and of the equally early Alpha (Thompson's table of Gr. Cursive Alph. cols. 1 and 2) would produce such a symbol: $\neg\angle = \neg< = \neg\wedge = \neg\sim$.

Such, no doubt, was the process of the development, not only of this, but also of the Kappa-shaped symbol, $\neg\leftarrow$ for which Dr. Kenyon conjectures the meaning *κεράμιον* (*Brit. Mus. Pap. Cat.* p. 164; on no. XXX. passim. q.v.). Accepting this conjecture as certain, we may see in the symbol (which is seldom as printed, a simple Kappa followed by a dash) a monogram-formation exactly analogous to the metrete-symbol, already proved by documentary evidence (*supra* p. 139). This is an even more simply and naturally formed monogram than the metrete-symbol, both offering an irresistible temptation to the pen, toiling painfully behind the thought, in the tedious repetition of an almost superfluous sign; the Kappa has been written, and there stands the Epsilon half-made; what but the most rigid scrupulousness could restrain the hand from completing it by the simple addition of the middle bar? ¹ It is to physico-psychological facts of the kind appealed to in such arguments as this, that we must look for guidance where demonstration fails; and often where demonstration is abundant. It may be only by such appeal that we can decide between two rival explanations. They are facts, however, which have behind them the whole history of alphabets, and if further digression were permissible, it would be interesting to illustrate them in detail, from *e.g.* the sematographic condensation of the ordinary cursive letters.

The symbol for 900 is a horizontal curve resting upon a vertical stroke. It may be seen, among Ptolemaic papyri, in B.M. Papp III. 43; XV. (8) 1 and 2. It becomes common in the Roman period. But it is important to notice that the vertical stroke is never doubled in these papyri, and is always long,

¹ The Kappa-shaped symbol, with the horizontal bar, is, as Mr. Hill reminds me, a not uncommon monogram of $\kappa\epsilon$ (= $\kappa\alpha\iota$) in Imperial times.

drawn well down below the line, from the middle of the curve. It does not in any way suggest a Pi. Then again there is a variant, which appears to be even the normal form in the Petrie papyri, which makes the traditional explanation (viz. San) of the other member almost equally doubtful. This variant is conventionally printed π (Mahaffy from Pet. Pap. Part II. of the Memoirs) and in hand-made facsimile \top or \top , (from Pap. Par. 54 recto,

Wilcken in *Observ. ad hist. Aeg.*). Further the  or , upon which

seems to have been based the traditional explanation¹ (on the strength of Hdt. I, 139) that the symbol is compounded of San (the Dorian letter corresponding to the Ionic Sigma) and Pi, does not appear until the minuscule period: indeed, Dr. Gow in 1893 states (*Companion to Sch. Classics*, p. 13) that no inscription or manuscript has it before about A.D. 900. He adds that its source is not known, and I conclude that there is no good authority even for its compound name, except the later general resemblance. I suspect that the addition of the second leg was the doing of some pedantic scribe or grammarian who decreed that the form must agree with the (supposed) origin indicated by the name. The probabilities too are against an ancient origin. Why should San (Sigma=200), and Pi (80) ever have been chosen to represent 900? The arithmetic is meaningless, whereas the early arithmetic of the symbols is quite intelligent and consistent. I conclude then that Sampi, the symbol as well as the name, is due to alterations of the original simpler \top or \top .² The latter, far from being a new letter

in tenth century manuscripts, is to be classed among the few which come into the earliest papyri already formed. For the origin we must wait until we are in possession of ante-Ptolemaic documents, or some facts to be supplied by epigraphy. Meanwhile the persistence of this symbol down to almost the latest Greek Manuscripts is a fresh illustration of the rule stated above (p. 137) that symbols best preserve the oldest forms.

$\Sigma=200$ was at one time supposed, as Professor Mahaffy says in the palaeographic notes in Part II. (pp. 39-41) of the Flinders Petrie Memoir, to be a later introduction, for clearness' sake, of the capital to represent the number. But he points out that it is regular in the third cent. B.C.³ sometimes with the angles rounded, but not C. It may have been felt necessary to keep this epigraphic form, to avoid confusion with the rounded 'Stigma' (usually ζ) for the numeral *six*.

¹ Vide King & Cookson, *Compar. Gram. of Grk. and Lat.* p. 26.

² Dr. Kenyon suggests that the former of these forms may be simply an arbitrary variant of $\top=90$. Mr. Hill suggests that the latter is derived from the sign used for $\sigma\sigma$ in some early alphabets; and that, if this sign followed

ω in the alphabetical sequence, it would naturally be used to represent 900. As this completes the alphabetic representation of all the numerals, it seems to me extremely probable.

³ B. M. Pap. XXVIII, 8 has $\top C$, which is edited as 200 dr.: this is however of the middle of the second cent. B.C.

The old Phoenician letter Koppa φ , used for the numeral 90, is commonly shaped more like an English written 9, in these papyri (Mahaffy, *ibid.*).

The Phoenician *Nor*, which is said to survive in the digamma, and to be the numeral for 6, has in these papyri a better representative than the letter Stigma. Cp. Pet. Pap. XII. (reign of the second Ptolemy); lines 18, 20, 21, show most decided forms $\vdash \in$. Line 19 has $\vdash F$, which the editor reads $\vdash \angle =$, but it may be the complete digamma—in that case a valuable example. Dr. Kenyon thinks it is Iota-Stigma, and so = 16. Stigma itself, he adds, is never found exactly in its traditional form, in the papyri, but regularly in a form which is indistinguishable from the ordinary Sigma. Thus it came about that the epigraphic Sigma was retained for '200.' Digamma of the F-shape however does occur in the papyri, in the Sappho fragment in the Oxyrhynchus papyri, and in the Alcman fragment in the Paris papyri.

The symbol for 'one-half.' The Ptolemaic form is \angle . In CCCII. r. (B.C. 152 or 141), lines 5, 9, 12, 17, *ib.* CCXXIII. 71, 8, it is sharply angular and rectilinear, but in CCCCI. (118–111 B.C.) 11, 12, 21, 27, the variant has the upper member much curved, while the lower or horizontal is [\subset] relatively longer. Its explanation is, I believe, involved in that of the following group.

The symbols $\left\{ \begin{array}{l} \text{or} \int^1 \end{array} \right.$ = $\frac{1}{2}$ drachma, or 3 obols, \subset = $\frac{1}{2}$ obol, \angle = 'plus

one-half' (scil. of the half-obol, and so indicating in some contexts 'quarter-obol'),² are all, like the simple 'one-half' symbol, special variants of a common sigle, the letter Sigma in some form which I assume stood in ante-Ptolemaic Greek for 'one-half.' The well established morphological affinity between SEMI- and $\eta\mu$ - would alone give probability to the theory of such a common prototype, both of the word and its symbol. The word in its oldest form undoubtedly began with Sigma (cp. Sans. SAMI). Now Sigma on Ionian and Chalcidian inscriptions has, besides its four-membered and five-membered forms, the parent-forms of the later Σ , also the following :

$\propto, \rho, \zeta, \S, \gamma, \nu.$

These are more than enough to account for the *forms* of the group in question which, I think, may prove to embrace some other signs also. The signs and symbols of these shapes are the most persistent of papyrus-symbols, and they are among the smaller class of those, of whose origin no explanation can be demonstrated from any of the ordinary forms of letters in any written

¹ Third cent. (B.C.) forms Pet. Pap. XXXIII (a), 24, and 32, which show both. \int second B.C. and later.

² Mahaffy in the Introduction to the second part of the Pet. Pap. gives this list for obols

~ or \subset (2) = (3) \int or \S (4) \int - (5) \int = :

($\frac{1}{2}$) \subset ($\frac{1}{4}$) \angle , and remarks on the $\frac{1}{4}$ -obol symbol: "(It) is so various that I am not sure whether it only represents one fraction." For the $\frac{1}{2}$ -drachma symbol, Dr. Grenfell has the same shape in the index of the Revenue Papyrus.

Greek yet recovered. But how are we to account for the *uses* of these signs, some of which are quite certain? To begin with the 'half-obol' symbol, M. Revillout, in *Lettres sur les monnaies Égyptiennes* 1895, says pp. 226-7, that it is found on Attic inscriptions sometimes in the form given above, sometimes facing round the other way, and 'indiquant soit la demie, soit la demi-obole.' This is strong confirmation of my opinion that the simple original meaning of the signs is one half,¹ and also of the third-century Sigma-like form. Similarly Revillout gives $\text{⌞} = \frac{1}{2}$ drachma and explains the 4-obol in reference to it, *i.e.* not as 3+1 obols, but as $\frac{1}{2}$ dr. + obol. Similarly for 5 obols. He quotes p. 229 the same explanation from an ancient *Tabula de mensuris ac ponderibus vetustissima* published by Hultsch in his *Metrologicorum Scriptorum reliquiae*, Leipzig, 1864. In this ancient table ('rédigé par les anciens') whose *provenance* was also Egypt, this ' $\frac{1}{2}$ symbol' is described as 'Ρωμαϊκὸν σῆμα, ⌞.' No doubt the writer, unaware of its existence in Ptolemaic times, was thinking of a late borrowing from the Romans in Egypt, but it is none the less a suggestive name. If we find the Roman system of notation with this S = $\frac{1}{2}$ (cp. HS) as a very ancient and very persistent part of that system, this certainly supports the argument in favour of a similar explanation of the corresponding symbol with the same value in the Greek notation.

The soi-disant ' $\frac{1}{4}$ -obol' symbol, attested in respect of value, for the 3rd century B.C. (vide Mahaffy II., p. 35).² is the 'one-half' Ptolemaic symbol in a special use. Its very various applications (vide *ibid.*), are illustrations of a practice which will be several times illustrated in other symbols, the practice of leaving the *special* sense of a symbol of general meaning to be indicated by the context. In $\text{⌞} \text{€} \text{⌞} \text{C} \text{⌞}$ (Pet. Pap. XXXIII (a) 24. cp. Part II., p. 35), there is little room for ambiguity. I should read it as 5 dr. + a half-dr. + $1\frac{1}{2}$ half-obols. Thus the same thing is done at each stage: dr. $5\frac{1}{2}$ comes to acquire the meaning 5 dr. + $\frac{1}{2}$ -dr, and the form ⌞ of 'one-half' is thenceforth specially reserved for $\frac{1}{2}$ -dr. So $\text{⌞} - \text{C}$ (*ibid.* 32), or $4\frac{1}{2}$ obols comes to mean $\frac{1}{2}$ dr. + 1 ob. + $\frac{1}{2}$ (ob.), the variant of ' $\frac{1}{2}$ ' being reserved for the new meaning. The general 'one-half' symbol used at the end of this series, and thus having a value (though not a signification) of 'one-quarter,' might possibly have passed into this special fixed use, had it not been successfully rivalled by the ordinary cursive symbols, one for ' $\frac{1}{4}$ ' written like other fractions having a unity-numerator, the other a Chi with a superscript Beta (= 2 chalci = $\frac{1}{4}$ obol). The forms ⌞ and ⌞ , which Revillout mentions (*ibid.* p. 227), do not occur, apparently, in any *papyrus*. He calls it the *tétartémorion* (τεταρτημόριον, which appears to be the classical name), and specifies it as the $\frac{1}{4}$ -obol of *silver*.

Concerning $d = \frac{1}{4}$, an instance may be added in support of Kenyon's explanation (*Pal. Gl. Pap.*, p. 145, n. 2), viz. $d = o' = \Delta' = \frac{1}{4}$, from Pap. XV., fr. 6, line 5, where the o (= 4), surmounted by a long vertical stroke is clearly

¹ In the same work at pp. 172-3, R. incidentally gives a fresh illustration in $\text{⌞} = \frac{1}{2}$ *artabe*.


² It is worthy of note that Dr. Grenfell gives in his index for the Revenue Papyri the form ⌞ for this symbol.

to be distinguished from any form of Delta, most of all from the particular example of it, boldly triangular, which stands immediately next to it. In this same line occurs another instance, equally convincing. For the vertical itself, see p. 141, n. 2 above.

This circular form of the Delta, while it need hardly be treated as a symbol requiring explanation, illustrates very well the general tendency to slovenly writing, or deliberate simplification, exhibited by letters of all kinds, when used in formulas, as parts of symbols, or in any position where the context renders differentiation unnecessary: this same small circle stands, in fractions,¹ commonly for 2, being a simplified form of the cursive loop, for Beta.

Similar slovenliness or simplification accounts for the second-century (B.C.) over-written Mu and Pi cited by Dr. Wilcken, from Paris Pap. 5. Cp. *Observationes ad hist. Aegypti prov. Rom.*, p. 40.


The rest of the obol-series can now be easily explained. These belong to the class, other members of which occur, in which numerals, used without expression of the monies, measures, etc. which they enumerate, depending for particular signification originally upon their position in a formula or common context, come gradually to acquire at the same time a peculiar form and a special meaning. The 'one-obol' horizontal would thus be at first an angular Alpha, the 'two-obol' symbol the same doubled,² the '4-obol' a collocation of the $\frac{1}{2}$ -drachma symbol with the former of these, and the 5-obol similarly with the latter. As regards the omission of the word 'obols,' it has parallels,

e.g.  = 2900, which in B.M. Pap. XV., fr. 8, line I, stands for 2900 *drachmas*, in line 3 (*ib.*) ϵ = 5000 *drachmas*? So frequently after 'talents.' Apparently against this explanation, at least of the '4-obol' symbol, is its occurrence *ib.* line 9 with the upper curve *detached*: but this is perhaps an accidental variation of no original significance.

This series is interesting from the fact that we have here the rare occurrence of a stroke or sign, worthy of being discussed as having a possible relation with a system of tachygraphy. We have actually the Alpha of the Greek tachygraphy of the Byzantine period³ (the Ptolemaic Acropolis tachygraphic fragment beginning the vowels only at Iota), in the short horizontal stroke, representing one obol. Of course, if — means $\delta\beta\omicron\lambda\acute{o}\varsigma$, then the resemblance to the tachygraphic Alpha can only be accidental. If, on the other hand, as I think, it represents the numeral Alpha, then we have perhaps here the origin of the tachygraphic sign itself, though it yet remains to be shown how and through what medium this Ptolemaic character persisted to the later Byzantine, when we first have its tachygraphic meaning attested.⁴

¹ In $\lambda\delta=\lambda\beta=\beta$. The fully formed Beta is written in CLXXI (a) 6, a Roman (102 A.D.) tax-receipt.

² The appearance of this symbol is very varied. In Ptolemaic papp. it is often very like the Talent-symbol, with which Forshall the early Brit. Mus. Editor actually confuses it in text of XV (13) reverse, and on reverse of

XV (14) with  = Aroura (Ken. ad loc.).

³ Wessely. *Ein System altgriechischer Tachygraphie* Taf. 1; or Rainer Pap. Taf. XIII. Nr. 444, a tachygraphic papyrus of the V-VI cent.

⁴ After this it is common in later Greek tachygraphy.

It could not be through the Roman cursive form of Alpha, and there is nothing to show that there was such a Roman tachygraphic form, Dr. Gitlbauer's reconstructions¹ for that period pointing to an oblique stroke, the *other* arm of the angular Ptolemaic Alpha. M. Revillout again (*ibid.* p. 228), but this time I think unconsciously, perhaps suggests an explanation, by the remark that in the Attic inscriptions already alluded to, he has found the one stroke for one obol, and the two strokes for two obols, not always horizontal, but sometimes struck at an angle ('couché ou simplement penché,' p. 229). But is this the other arm of the angular Alpha, or a simple stroke marking One? The latter is the ordinary method for 1 to 4 on the older Attic and Peloponnesian inscriptions and may very well have survived in this 1-obol symbol. A tendency in upright strokes to fall flat is to be observed in many letters and symbols in the papyri. The pros and cons seem equally balanced, and all one can say is that there is *nothing against*² the following 'genealogical tree'

I, // 'one' and 'two' (units) in inscriptions.

I, // 'one obol' and 'two obols' in papyri.

—, = the same in both papyri and inscriptions.

And this I think the more likely.

Of the remaining Ptolemaic symbols, the commonest is $\perp = \epsilon\tau\omicron\varsigma$ and cases.

This symbol, while it is so frequently a mere right angle as to justify the conventional \perp , is quite commonly in Ptol. MSS. of a different shape, beginning with a very prominent hook on the left side (*vide* Papp. XVIII., 1, 18, XXXV., 11, 13, XXIV., 10, 25, XVII., 44, 39, 49, 19, XLI., 23, XXIII., 56), and having, instead of a clear right angle, a distinct hook at the junction of the vertical with the horizontal, so as to give the whole symbol a resemblance to a loosely-written 2 (*vide* Papp. XVIII., 44, 39, 19, XXIV., 10, 11, 25). In addition to these, certain other divergencies from the rectangular formation may be observed at XVII., 19, XVIII., 20, 18, XXXV., 13, XXIII., 56, 64, 82.³ The horizontal is originally only the connecting stroke (cp. the persistence with which the ligature is made, at XVIII., 1, 20, 18, XXIV., 11, XLI., 23, XXIII., 56, 82, 105, whenever the numeral follows the symbol as against the comparative neglect of it when it precedes).


But, as Dr. Kenyon observes, the papyri of the third century B.C. have


¹ *Die drei Systeme der Griechischen Tachygraphie*, Taf. 11.

² I do not consider that the peculiar variant C which Dr. Mahaffy notes as occurring all through Pet. Pap. XXXIII (*vide* Part II, 35) is important against it, as he points it out as exceptional, in the third cent. B.C. Of course, for what it is worth, it does favour the Alpha

theory.

³ There is an example in a Roman (2nd cent.) pap. B.M. C^UCXXXIX. 15, which, accidentally, illustrates a possible Epsilon-stage. With such a form the development might have been $\epsilon \rightarrow \text{C}$ (or ligatured C) — C or C — C C , or C .

not this backward hook ; they are rigid right angles, rising high above the line, *e.g.* Pet. Pap. XIII., fr. 2 and 5. If we compare with these earliest forms such occurrences of the common large initial epigraphic Epsilon as in B.M. CCCCH. recto 20 where it has a decidedly rectangular formation, and again the special uses of it for $\epsilon\tau\omicron\upsilon\varsigma$ as in B.M. Pap. CCCXXXII., ,

and again with the form \perp , Pal. Soc. ii. pl. 144, and yet again $\epsilon\tau\omicron\upsilon\varsigma$ (Aristotle Pap.), we have a hint which can hardly be overlooked that we have in this symbol simply *the most characteristic fragment of an Epsilon* ,

used as an abbreviation for the whole word $\epsilon\tau\omicron\upsilon\varsigma$. Fortunately, I have been able, by comparing notes with Mr. G. F. Hill, of the Department of Coins and Medals of the British Museum, to establish the explanation thus suggested. I am much indebted to him for pointing out the following references. The symbol, it appears, is common on Alexandrian coins with the same meaning, and it was formerly thought to stand for $\Delta\upsilon\kappa\alpha\beta\acute{\alpha}\varsigma$ (see *Berl. Blätt.* iv. 145), but Mr. Head in his *Historia Numorum*, 1887, discarding this explanation, speaks of it as 'an Egyptian sign' (p. 718). Prof. Wilcken refers the symbol to a demotic origin (*Griech. Östr.* p. 819) and Mr. R. S. Poole, in the British Museum Catalogue of Coins of Alexandria (p. xi.) thus summarizes the case: '*Symbol \perp for the year.* The date, except on the earliest dated coins of Augustus, is universally preceded by the symbol \perp for 'year,' but $\epsilon\tau\omicron\upsilon\varsigma$ occasionally takes its place. The symbol is of uncertain origin. It first appears on coins which I have attributed to Ptolemy IV. Philopator, struck in Cyprus, etc. (Cat. Ptol. pp. 62, 63). Under Ptolemy VIII., Evergetes II., it became almost universal for all dated coins, and except on some coins of Augustus, until the Reform of Diocletian. Probably the symbol is a conventional form of the Egyptian sign for year in the demotic character.' Mr. G. F. Hill, in his monograph on the coins of the Cilician *Olba*, *Cennatis*, *Lalassis* (in the Numismatic Chronicle, vol. xix., pp. 181-207, 1899), produces evidence of forms which point us back to my explanation above given. On the coins struck by Ajax, son of Teucer, probably $\alpha\rho\chi\iota\epsilon\rho\epsilon\upsilon\varsigma$ of Olba in the earliest decades of the first century, occurs a rare form of Epsilon, viz. ϵ , which Mr. Hill thinks occurs on no other coins.¹ This is used, with a capital Tau, for dating, the two letters

being often made into a kind of monogram thus $\epsilon\tau$ A. $\epsilon\tau$ B = 'in the first year,' 'in the second year.' There can be no doubt remaining that this is an abbreviation of $\epsilon\tau\omicron\upsilon\varsigma$. But what of the relation with the papyrus form \perp ? The later date of these coins of Olba prevents us from claiming their forms as the origins of the earliest papyrus forms, but they corroborate very strongly the slighter indications of papyrus cursive forms themselves. For not only have we in Nos. 1, 7, 12, 13, the monogram arrangement mentioned, but in Nos. 2, 4, 9, 10, 11, there is a slight variant which imme-

¹ He quotes *J.H.S.* xix p. 15, no. 9 to prove its occurrence in lapidary inscriptions.

diately suggests the papyrus \angle , viz. \angle \top ; and once at least, in No. 8, there is uncompromising severance of the two elements, leaving \angle \top B (= $\epsilon\tau\omicron\nu\varsigma$ β), which shows how easily the simple angle could be adopted, in the hastier writing of manuscripts, as the symbol of the word. If, therefore, a Cilician Epsilon of the form \angle could lead to a symbol \angle , would not an Epsilon of the form E easily give \angle ? This, added to the testimony of occasional papyrus forms such as those above instanced, and to the probability that the ligatured Tau and following letters would make a return to the Epsilon somewhat inconvenient, so that it would tend to be left \angle , is sufficient, in my opinion, for the definite conclusion that we have found in E the origin of the symbol.

The rival symbols \top and \angle or \angle for 'drachmas' are both thoroughly stereotyped symbols appearing equally early, and both very early, in Ptolemaic papyri, while the former is used in Attic inscriptions from the fifth cent. B.C. onwards. But the former is the regular symbol in the early Ptolemaic papyri (Pet. Papp. XVI. (2) 7, 8; XXXIII. (a) 24; and in 2nd cent. B.C., B.M. Papp. XXX. 2, 3; XXIX. 3, 4, et passim; XXV. 2, 3). Comparison of the second with the third century forms will show that the older type is squarer, that is, has the two members more nearly equal, the horizontal bar even the longer in some occurrences. This may be accidental, or it may be a clue to the origin, which is at present unknown.¹ The comparatively rarer use of \angle or \angle seems to suggest that these forms may be simply, the one a fragment of the regular form, and the other a modification of that fragment. Certainly the lower member is still in the papyri of second and third centuries B.C. horizontal, as distinguished from the Roman \angle . B.M. Papp. XLI. 23, 24; B XXIII (3) 47, 59, 74, 77.

\star , a symbol which occurs in the following context, $\tau\eta\varsigma \xi \star \lambda \zeta$ (quoted by Professor Mahaffy, Pet. Pap. Pt. II. p. 37) may be 'some title for a regiment,' but nothing else is known of it. It is generally explained as = $\delta\epsilon\kappa\acute{\alpha}\tau\alpha\rho\chi\omicron\varsigma$ or $\delta\epsilon\kappa\alpha\tau\alpha\rho\chi\acute{\iota}\alpha$, on the analogy of ρ = $\acute{\epsilon}\kappa\alpha\tau\omicron\nu\tau\alpha\rho\chi\omicron\varsigma$.

\bigwedge placed between two numerals occurs apparently in only one B.M. Pap., viz., XV. (second B.C.) fr. 8 (lines 2, 10). Here its meaning is mysterious (Kenyon² ad loc.). In both instances it separates the two elements of $\tau\iota$ = 310 without adding anything to that meaning which is required to make

¹ It is perhaps worth noting that the Phoenician letter Heth \mathbf{H} actually became \top , used as the sign of rough breathing, in Alexandrian grammars, and, at an earlier period, in some epigraphic alphabets; while, curiously enough, a fuller form (?) of the drachme-symbol viz. E is noted (Mahaffy Part II pp. 39-41 on Pet. Pap. VIII (1)) as being found 'where we should expect drachme,' \top . Lastly, to add

another element of perplexity. Plate XLVI in Part II of the Pet. Papp. has in line 15, the symbols $\tau\kappa\epsilon$ \mathbf{E} , which Mahaffy translates 325½.

² Subsequently, Dr. Kenyon writes: 'must indicate the object for which the money (10 dr. in l. 2, 85 in l. 8) is paid.' This value for the sum of drachmae removes the chief difficulty, and increases the probability that the unknown symbol is simply = $\alpha\lambda$ = 'item' 'ditto.'

up the total. No other symbol for 'drachmae' is used, so that it is just possible that $\tau \nearrow \mu = \zeta \tau \mu$. As to the exact form of the symbol, in one instance the upper member, in the other the lower, is the larger. It is not quite like the $\Xi = 2$ obols, nor some similar forms of $\asymp =$ talents, for in the present symbol the convex side is upward in *both* members. It thus resembles very closely some forms of $\nearrow = \alpha^{\lambda}$. Cp. CCCCH. v. 11 (B.C. 152 or 141).

There remains only to draw the conclusion (1) that the symbols of Ptolemaic papyri are not in origin arbitrary, but are the results of abbreviation of words or parts of words. Of nearly 40 symbols examined, we have found six only which will not yield to explanation by reference to alphabetic or epigraphic forms; in quite twenty cases the actual process of development is demonstrable by documentary proofs; in five more, the inferential argument is very strong; in four or five more hardly less so; while in more than one case of recalcitrancy, the symbol itself does not appear to palaeographical authorities to have an assignable meaning.¹ It may then be fairly asserted that the position is maintained.

(2) The statement that there is no trace in this period of borrowings from tachygraphy is hardly more than a corollary of the foregoing conclusion. I am convinced that there is nothing here which can be called tachygraphic, except in so far as all symbols, ligatured characters, and even sometimes cursive writing, must partake of that quality.

THE ROMAN PERIOD.—NON-LITERARY.

The results, and the methods, as regards the papyri of this period are very similar. This is surprising, as there was certainly for this period the presumption that formal tachygraphy would be found to play at least a small part in the process of abbreviation. On the one hand, simple abbreviation was practised much more freely in the cursive writing of this period than is in any department the case with modern English, and on the other hand, there was in existence (so at least there seemed good reason for believing: vide my article, 'On Old Gk. Tachygraphy,' *Journal of Hellenic Studies*, Vol. XXI., 1901, Part II), a system of tachygraphy by means of partly geometrical symbols, which should have supplied a certain number of its constituents to the general handwriting. But the more closely one investigates the *rationem formandi* of the symbols which occur in Ptolemaic and Roman MSS., the more is one convinced that these symbols generally were unconscious developments from cursive abbreviated words. Indeed the proportion of those which yield to analysis is so large as to make it improbable that the few which prove intractable can be arbitrary borrowings from other formations or systems.

¹ E.g. in the case of \nearrow vide Kenyon B.M. Pap. Cat. p. 56.

There may be exceptions among the Greek symbols of the magical papyri, but in that case the borrowings are not from Greek tachygraphy (there is one line of pure tachygraphy which will be discussed), and it is impossible to predicate securely anything concerning them, as it is also concerning the origin, rational or other, of the 'apparent gibberish' (Kenyon, *Brit. Mus. Cat. Pap.* 1893: Introd. to Mag. Papp.), which composes so large a part of the magical formulas. The many formulas moreover, containing symbols which are not Greek though found in the Gk. MSS., are beyond the scope of this monograph.

As regards the details of the analysis, we find in the first place a few traces of the alphabet of the early Ptolemaic period; more frequently new and non-Ptolemaic forms. Again, we have, as in Ptolemaic MSS., many symbols which have become fixed in their now irrational forms, petrified by the action of time and use; many on the other hand which can scarcely be counted as symbols at all, so conscious is the introduction of each constituent, sometimes partly mutilated or transformed: these however are the ancestors of future symbols; and again there are symbol-phrases, groups of characters, in themselves singly to be read as ordinary forms, but in the groupings barely distinguishable from symbols, such as καὶ παίδων .

ἐν Διὸς πόλει .

A distinctive feature of Roman non-literary MSS. is the increase in the number of monograms. They are found, naturally, most frequently in the magical papyri, but they are by no means confined thereto. They are not generally irrational, yet the regular crossing or interlacing of certain letters gives them an entirely new value, and the combination has more than one claim¹ to be discussed as a symbol (*vide infra*, p. 167 *sqq.*)

What survivals of Ptolemaic symbols do we find in this period? They are: the angular Alpha (third cent. B.C.) in $\text{τρυν}^{\text{L}}\chi(\text{τος})$ (Pap. CXXXI r. 83, 91, 152, 224, and three others in same MS.); $\text{παρ}^{\text{L}}\delta$ (*ib.* 62); $\text{λημ}^{\text{L}}\mu(\text{τα})$ etc., (*ib.* 6, 173, 353, *et passim*); $\delta\iota^{\text{L}} = \text{δια}$ (*ib.* 566, 567, 579, *et passim*), and other numerous instances of the symbol L , representing a group of letters beginning with Alpha: $\text{λα}^{\text{L}}\chi(\text{νον})$, $\text{κον}^{\text{L}}\iota(\text{τος})$, $\text{κοβ}^{\text{L}}(\text{λενοντες})$, etc. (*ib. passim*); the same in composition discussed in another place (*infra*); the same Alpha reduced to a simple horizontal bar, notably in the ἀνά -symbol; $\text{L} =$ 'drachmae.'²

(Papp. CXIX, CXXXI *passim*); the symbol for 'talents'; $\text{L} = \text{ἔτος}$ and cases, (CXXXI, 23) ep. ostraka of this period: B.M. No. 14,113 = Pal. Soc. 11, 1,

¹ The expedient for instance is largely used in modern reporting, *e.g.* in 'phonography,' where *e.g. n* crossed by *t* has the meaning 'notwithstanding'; *tmp* crossed by *s* becomes 'temperance society.'

² The Ptolemaic $\text{L} =$ 'drachmae' does not survive: the Ptol L or L now appears in the last shape, with the horizontal lowered and bent generally.

2, all first—second cent.); the whole series for obols, and for chalci; / or λ = total, or for concise re-statement; the whole of the numerals, including some fractions; together with some signs or marks of abbreviation, etc., viz. a superscript horizontal, a vertical undulating line, a straight line inclining to the right.¹

What new symbols first appear on papyri in this period? In the first place there is the whole group of distinctly magical symbols; then come certain symbols of weight and measure,² numeration and coinage, namely $\overline{\gamma}$

\cup = $\acute{\alpha}\rho\upsilon\pi\alpha(\iota)$ and cases; \S or S = $\delta\rho\acute{\alpha}\chi\mu\alpha\iota$; X , X , and γ , with debateable meanings; some fractions; $\underline{\quad}$, \neg , etc. = $(\pi\upsilon\rho\omicron\upsilon)$ $\acute{\alpha}\pi\rho\acute{\alpha}\beta\alpha\iota$; \neg = $\acute{\alpha}\pi\rho\acute{\alpha}\beta\alpha\iota$; a superscript horizontal = Nu over final letters; \mathcal{S} = $\delta\iota\acute{\alpha}$;³

\ast , denarius; a number of monograms; and a sign \S of varied application, to be discussed with other debateable signs; together with certain marks made by the scribe, chiefly marginal, some of which are paragraph-marks, or marks of reference, while some must remain unexplained.

Perhaps the most striking feature of the sematography of the Roman period is the prominence of that sign or mark, which appears generally as an undulating line written vertically, its bows turned the same way as that of an S, but varying, under the influence of haste and carelessness, from the vertical almost to the horizontal position, and from the rounded S-shape to the almost straight line. Its significations are very varied; it is used as the simple mark of general abbreviation commonly;⁴ joined to a horizontal it means 'one-half,' e.g. B.M. Pap. CXXXI., 76, 41, 55; Fay. Pap. LIV., 13;⁵ in 22, 23, of the same, it means cases of $\alpha\upsilon\tau\acute{o}\varsigma$; in any other places it is the loose equivalent of the old \angle = drachma; even the strongly characteristic Ptolemaic right-angled 'year'-symbol gives place to it, e.g. in B.M. Pap. CLXXXII. b, 1, CCCLXXX.; Fay. Pap. XXVI., 7, etc. The document on the recto of the Aristotle papyrus, from which illustrations have just been taken, furnishes many examples of the confusion of form, which has fallen upon the large group of symbols

¹ The sweeping curve of the Roman and Byzantine periods, a semicircle with its convex side to the right, is not also Ptolemaic

² Wessely (*Ein. Syst.* p. 8) mentions metrological *signa*, figures and fractions, in cursive texts of Berlin and St. Petersburg. But he gives no details.

³ $\kappa\alpha\iota$ has also been suggested as a meaning (*vide Brit. Mus. Pap. Cat.* Vol. II. Index of Symb.).


⁴ An interesting and rather extreme example of this use is $\Delta\varphi = \delta\iota$, and $\varphi = \gamma\rho$, in CCCXV 18. Cp. variants CCCXXIX 23 (rising high above the line). Cp. also $\sum = \delta\iota\acute{\alpha}$ Oxyr. Papp. CCLXXXIX (1) 12, 19; CCXC, 20, 23.

⁵ Only incidentally does it mean $\eta\mu\acute{\omega}\beta\omicron\lambda\omicron\nu$ (so Edd. of Fay. Pap. pp. 181 and 347). *Rule supra*, pp. 146 *sqq.*

of which the sign is an element. Compare line 55 with 63; 76 with 65; 23 with 28; 28 with 41; and again the common sign for drachmas in line 34 with the figure of S laid flat (for the same) in line 55. Here, as in Roman uses of the sign on papyrus generally, there is neither consistent distinction when the meaning varies, nor clear uniformity when the meaning is constant. Again and again the Editors have had a difficult task to decide whether the undulation, the zig-zag, the crescent, or the double-bow shape¹ has the best right to represent a certain written form.

What we have in the MSS. is a flourish or curved line, written very negligently or fancifully by the scribe, the meaning being securely conveyed by the formula, a formula being the almost invariable context. An illustration of this quite natural and inevitable confusion is to be seen in the occurrence of two symbols, which are conventionally printed $\angle = \acute{\alpha}\rho\tau\acute{\alpha}\beta\eta$ ('rare'), and $\frown = \acute{\alpha}\rho\tau\acute{\alpha}\beta\eta$ (rare), (Kenyon, *Pap. of Gk. Pap.* 1899, Append. IV.).

These are identical in appearance with the common drachma-symbols: their use for 'artaba' is probably a transference, accidental or very occasional (cp. Pap. XXIII. (3), line 77, where exactly the same 'slip'—Kenyon—is made in an earlier MS.). It would obviously not be convenient to use the same printer's type for all the symbols \angle and \frown ('artabae') \angle , \S , β , ('drachmae'), \S = 'half,' \S = $\epsilon\tau\omicron\upsilon\varsigma$, and marking abbreviation, but these all tend to run so much into one another that nothing but the context avails to differentiate them. And the prevailing degenerate form for them all is in appearance indistinguishable from the \S -stroke.²

Often similar in appearance to the last-mentioned is the simple oblique bar = γ ($\acute{\iota}\nu\epsilon\tau\alpha\iota$), which marks the introduction of a group of symbols. It is normally straight, and inclined to the right, but has variants inclined at all degrees, to the quite horizontal, and bent and twisted variously. The occurrences are too common to be worth quoting, but a characteristic result of the free use of signs may be seen in CXXIII. A.D. 166 where 

stands for \angle (Kenyon, Text, Gk. Pap. in B.M., vol. II., p. 199). In some cases part of the formula becomes welded to this abbreviation-sign, forming a virtual symbol: a second abbreviation-mark, viz. the horizontal superscript (originally the mark of inclusion) is sometimes found.

Pap. CXXXI. 532, 23, 562, 22, CXXXI. 2, 19, 20, CXIX. 8, show variants of such a combination for $\alpha\upsilon\tau\acute{o}\varsigma$ (case) &c., the particular case, like the general meaning, being determined by the presence and the case of the article. The value of the sign indeed is often merely *addendum quid*. Some confirmation of this opinion as regards the $\alpha\upsilon\tau\acute{o}\varsigma$ -symbol may be seen in the more precise contraction of later MSS. in which the sign was felt to be

¹ That is, the printer's types of these shapes.

² Cp. the same stroke again in an unusual abbreviated Ἡφαίστου viz. $\text{ΗΦ}\} \text{CXXXI r. 329, 372.}$

Cp. CCCXXV (a) and (b) where (a) line 5 has the sign for 'year' absolutely indistinguishable from the sign of abbreviation in (b) line 1.

too indefinite,¹ and the latter of the two abbreviation-strokes was replaced by a syllable giving the full case ending- $\tau\omicron\upsilon$, $-\tau\hat{\omega}$, &c., resulting in $\tau\omicron\upsilon\tau\omicron\upsilon$ &c., the bar of which was mistakenly supposed to signify av -. Sometimes *e.g.* CXXXI. r. 22 the same component elements are written detached from one another. In the Aristotle papyrus (*e.g.* col. IX. 8) a single stroke is found; as also in the Demosthenes scholia of it. Dr. Wessely has found it, in the fuller form (with horizontal), common in the Hermopolis Magna papyri of Vienna.²

An even more convincing pair of the same class is that which consists of the same abbreviation-sign joined to the first two or three letters of $\chi\alpha\lambda\kappa\omicron\upsilon$ and $\acute{\alpha}\rho\gamma\upsilon\rho\acute{\iota}\omicron\upsilon$ with the meanings 'copper drachmae' and 'silver drachmae' (cp. on $\pi\upsilon\rho\omicron\upsilon$ $\acute{\alpha}\rho\tau\acute{\alpha}\beta\eta$ pp. 84, 85 inf.) respectively. The vertical sign in the latter is certainly not different from that which helps to form $\alpha\upsilon\tau\acute{o}\varsigma$ and cases, in many of its occurrences (*e.g.* CXXXI. 23); and the mode of joining to the superscript vertical is the same. Cp. CXXXI. 6, 74, 173, 177, 178, 179, *et passim*. The ligature-formation is a characteristic feature of this symbol: the sign always or commonly having a distinct shape when written alone (cp. *ib.* col. 8 where the extreme right-hand col. of numerals exhibits both). In the symbol for copper 'drachmae' (*e.g.* *ib.* 28, 191, 196, 200, 213, *et passim*) the ligature-formation exists, but not quite the same; the Chi is written so that the straighter of the two cross-bars, struck from below upwards to the left, is carried on into a cursive looped, or else into an archaic angular Alpha, this into the horizontal sign of abbreviation, and this again into the descending sign in question. The formation of this pair of symbols is thus quite rational and consistent, and it may be added, in defence of the assumption that the meaning came eventually to depend upon the context, that they are quite free from ambiguity—perhaps owing to the doubling of the sign of abbreviation (cp. for the single horizontal over a similar group of letters *ib.* 187, 192 195, *ib.* 26; common in this MS.).

It may be convenient to epitomize these results:

| | | |
|-----------------------------|--|--|
| $\tau\hat{\omega}$ | $\tau\hat{\omega}$ + addendum quid | $\tau\hat{\omega}$ $\alpha\upsilon\tau\hat{\omega}$ |
| | cp. $\tau\omicron$ } = $\tau\acute{o}$ $\alpha\upsilon\tau\acute{o}$: $\tau\omicron\upsilon$ } = $\tau\omicron\upsilon$ $\alpha\upsilon\tau\omicron\upsilon$. | |
| $\acute{\alpha}\rho\gamma$ | $\acute{\alpha}\rho\gamma$ + addendum quid | { $\acute{\alpha}\rho\gamma\upsilon\rho\acute{o}\upsilon$ νομίσματα or drachmae |
| χ | χ + " " | { $\chi\alpha\lambda\kappa\omicron\upsilon$ νομ. or drachmae |
| $\delta\iota\omicron\kappa$ | $\delta\iota\omicron\kappa$ " " | $\delta\iota\omicron\kappa\acute{\eta}\sigma\epsilon\iota$ dr. ν . |







¹ The same demand for definiteness in later days is seen in mediaeval commentaries of *Notae Tironianae*. In these we get careful restorations of case-signs and general word-endings where the earlier *notarii* had been satisfied to trust to memory and the context. The in-

creased exactness is in all these cases in inverse ratio to freshness and spontaneity, and easy familiarity with the language to be written.

² See his interesting study of the symbol in *Archiv für Stenographie*, Berlin, January, 1902.

³ CXIX, 4.

The rest of the series is:—

| | | |
|---|--|---|
|  | — + addendum quid | 2 obols + $\frac{1}{2}$ (ob) |
|  | χ | ? <i>χοίνικες</i> ¹ |
|  | $\alpha\bar{\nu}$ + addendum quid | <i>ἀνά</i> drachmae |
|  | used alone before numerals | drachmae |
|  | used alone before smaller fractions | one-half (and so $\frac{1}{2}$ -obol <i>ἡμιόβολον</i>) ² |
|  | used alone with a numeral giving a regnal year. | <i>ἔτους</i> |

As regards the latter members of the series, there are some remarks to be made. In CXIX. 10 and perhaps XCIX. (1) 21 there is the sign with the signification ' $\frac{1}{2}$,' but it is *reversed*, (ρ), as compared with *e.g.* CIX. B. 74, 75, 84. Examination shows that the ligature is responsible for such variations, just as the ligature is responsible for the common position. It is, in fact, *convenience in forming the ligature* which everywhere decides, within certain limits, the form of a sign, and sometimes a whole symbol. Cp Fay. Papp. XLV. 8; LIII. 6; LVI. 7; with LIV. 13, where different variants of this sign are used for the half-obol.

Side by side with this sign for 'one-half' is often the simple crescent curve resting on the line on one end of its convex side as conventionally printed,⁴ and this no doubt is the direct descendant of the acute-angled Ptolemaic 'one-half' symbol.⁵ But certainly it is also of exactly the same form as the curve of the series under discussion. Cp CIX. B. fr. 2, line 74 (second cent.). The formula however saves it from ambiguity, its immediate context being (1) a whole number which it follows (whereas the similar drachmae-sign regularly precedes the number), or (2) part of a compound fraction at the head of which it stands. The latter case would sometimes offer room for ambiguity, viz., when parts of the drachma had to be expressed, were it not that the latter are never represented by fractions, but by 'stereotyped' symbols for obols and chalcī.⁶ The fact that fractions higher in value than one-half (except the exact $\frac{2}{3}$ and the exact $\frac{3}{4}$) can only⁷ be expressed in Greek with the help of the one-half symbol standing first, has given great security to the use of a very slight mark for the latter; one might almost say

¹ *Χάρακος* vide p. 158 infra.

² CXIX. 5, cp.  = $\lambda\alpha\chi(\alpha\bar{\nu}\iota\alpha)$.

³ CCLXXXVIII, 4 et saep.; CCLXXXIX, i, 10, et saep.

⁴ Grenfell and Hunt print it (Fay. Pap. XI. 15, p. 347, etc.) as a plain right angle.


⁵ Which in Ptolemaic papyri has a well-


marked rounded variant.

⁶ These are not new in the Roman papyri and have been explained under Ptolemaic (p. 146 *sqq.* supra).

⁷ In a few places there is used a method of expressing numerator and denominator. See par. on fractions inf. p. 160 *sqq.*

that for this, as for almost all the 'addendum quid' signs just discussed, any scratch will do. Certainly it is impossible to read the non-literary papyri by tables of alphabets and of symbols however elaborate. Only perfect familiarity with the formulas, recurrent phrases, and the probable intent of the scribe in the wording of the rest can unlock the secret of the scribbled hands, as careless or as hasty then as now. But in the matter of symbols there is the additional tendency to abbreviation which has been alluded to above (p. 136) which leads away from a multiplication of distinct signs or symbols for particular words. However that may be, the fact remains that we have in this large group the repeated application of the same curve or flourish, whose commonest and simplest use is to mark abbreviation, in about a dozen different significations determined almost wholly by the formula.


To conclude this group with a consideration of . The establishment of the meaning I have given it is more difficult, as the Editor for the Brit. Mus. Trustees (Kenyon, p. 152) expresses a contrary opinion. Against his earlier reading as 'copper-drachmas' which he does not now maintain¹ may be set certain palaeographical facts. In the first place, CIX. B. fr. 4, col. 2, line 124, has an erasure of this symbol with the symbol for μέτρα, which occurs in the Paris papyri and in B.M. Pap. CXIII. 9 e, written over it, in its place on the same spot. It is a clear case of deliberate substitution: they are not then variants. But the fact that 'metra' takes the place of the symbol in question, not once but several times in these same columns, is an argument against the signification 'drachmae,' and in favour of 'choenices.' Again, the meaning 'copper-drachmae' already belongs to another symbol, shown in the above illustration. Concerning the signification in that case there is no difference of opinion. That meaning is consequently impossible for the symbol in question. Dr. Kenyon, however, does not think that anything satisfactory can be made of the meaning 'choenices.'² He quotes a more probable explanation: 'Wilcken has suggested that the numbers attached to this symbol are reference numbers to a tax-register, showing the places from

which the names which follow are taken. The symbols ³ and 8 would then indicate sections of the register, the former standing for Χάρακος the name of a district in Thebes (see Pap. CXIX.) and the latter for some other district (he suggests 'Αγορά'). I think this is an ingenious suggestion.'


Touching the employment of the simple undulating flourish alone and detached, to signify 'drachmae,' we observe that it is, first, somewhat rare;⁴ secondly, it stands side by side with the Ptolemaic form⁵ whose conventional

¹ Privately communicated, May 1901.

² That is to say, in this particular context. For a Chi=choenices certainly occurs, cp. Oxyrh. Pap. CCLXXXVII, 7, 8.


³ A slip, I think, for .

⁴ Its variants boldly formed however occur early. Cp. CCII, late 1st. cent.


⁵ The common Ptolemaic  is not Roman.

representatives are < and 3 and is probably the result of confusion with the same form made loosely.


The same sign, used for L ('year'), is well attested for this period. Cp. Brit. Mus. Pap. CLXXXII. b. 1, where it occurs twice, once to mark abbreviation, once for the year. The Editor (Cat., p. 62, n.) notes that the two forms are the same, and prints both S-shaped. Cp. also CCCXXIII., 7; CXCVII., 3; Oxyrh. Papp. CCXXXVII., iv. 6; XXXIV., ii. 15. The


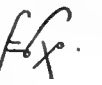
ordinary Roman drachma-symbol  presents no ambiguity. It is clearly the same as the Ptolemaic symbol of the same shape.

The safest place in which to look for normal forms, free from the confusion of neighbouring signs and cursive, is in a document like CLXXXI. A.D. 64, where clearly divided columns give no room for ambiguity. Studying this, and comparing it for exactly the same arrangement of the drachmae-symbols, with CXCI., late second cent., CCLIV. verso, second cent., CLVI. early third, which together present nearly 150 examples, we may be convinced


that the normal is the simple , without other addition. Curious di-

vergencies and variations are frequent, but the majority of quite normal examples is overwhelming. There is, however, an apparent variant of great importance. It consists of the normal symbol *preceded* by a long straight bar, inclining generally a little to the right. Its occurrences with the symbol are perhaps as numerous as those of the symbol without it, but the occasions of its introduction are interesting. It may be studied in CCXCVI. 7 (A.D. 160); CCCXXIX. (A.D. 164); 8, 9, CCCLII. (A.D. 220), 5, 6, 7, 8, where the symbol is used first with and then without the upright in close succession, each concerned with the statement of the same monetary values. This method of *duplicate statement* is not confined to money sums but is found with artabae, metretae (CLI.), etc. The usual arrangement is as follows. First the sum is stated in words at length. A contracted form of the measure or coin—artabe, drachma, etc.—and the fractional symbols are permitted here, but the principal numbers are written in full. Then an upright bar is drawn to introduce the duplicate statement all in symbols. For


example, CCCXL., 3, and CCCXII., 6, 7, respectively  $\epsilon\iota\kappa\omicron\sigma\iota$, $1 < \kappa$; and

< $\epsilon\iota\kappa\omicron\sigma\iota$ $\epsilon\pi\tau\alpha$  $\kappa\zeta$ . (Cp. CLXX.; CCCXLVII., col. 2, lines

9, 11, 12, 14, 15; CCCXIX., 9).

It is clear that the bar belongs not to the symbol next to it, but to the whole group. It is a variant use of the common 'total'-symbol. This 'total'-symbol is identical in shape, and as an additional suggestion that they are the same in origin, there are occasional variants of each to be found which are also identical. In CCCXXX. (A.D. 164), 6, 7, there is the form .

in a variant of /<. In third century MSS. this upright bar exhibits the same tendency to fall down into the horizontal, as observed with similar signs. In CCCXLIX. the horizontal is regular: and here it sometimes stands for drachmae to the exclusion of the symbol. It may fairly be concluded that the bar in the drachmae-formula is used with the same intent and feeling as the acknowledged 'total'-symbol, viz. to *introduce a concise re-statement*. Cp. CCCCLXXVII., 6; CCCXXXIII., 28; CCCXLI., 9; CCCXLIII., 8, all second and third century, where the use is clear.¹

The sign of a shape  already found in Ptolemaic papyri and also in Roman papyri with various meanings, is used for 'deduct' or 'less.' Fay. Pap. CL, r. (iii.), 4 *ib.* v. (i.) 10 and so, often. In B.M. Pap. CCLXVII., l. 300 (first or second century) it is a large right angle, like the εἶδος-symbol. It is at present unexplained.

A star-shaped symbol for 'denarius' occurs in the Fay. Pap. *e.g.* CV., i., 11, etc. and Oxyrh. Pap. LXXXV., ii., 17; iv., 17. This is not native to the papyri, being the Roman sign for the Roman coin, borrowed directly from the Roman notation (*Vide* Marquardt, *Privatleben der Römer*, p. 101). It is X=10 crossed by a horizontal.

We come now to the fraction-symbols. Exclusive of the ordinary numerals, the symbols for fractions do not form a large class. But apart from the symbols proper, there are found, for the expression of fractions, some interesting applications of the common methods of numeration. For one, see B.M. Pap. CCLXV. where there occur fractions with numerators (other than unity) and denominators both expressed, the *denominator being written above* the other. Dr. Kenyon (Brit. Mus. Pap. Cat., Vol. II., p. 259) says that this method is not otherwise known in papyri, though it appears to be regularly used by Diophantus.²

The examination of the few symbols which are used for the most common fractions, alone belongs properly to this monograph, keeping within the limits first above set. Is there inter-relation between the common symbols for one-quarter, one-half, three-quarters? The first and second have been discussed in the Ptolemaic section, pp. 146 *sqq.* as well as incidentally among Roman symbols. Adopting Kenyon's opinion (Pal. Gk. Pap., 1899, p. 156, n. 1) for the last, we have the explanation of the series, which may be briefly stated thus: the 'one-quarter' symbol is a degenerate Delta distinguished by the fraction-making (p. 141 above, note) vertical stroke; the 'one-half' symbol is the Ptolemaic angular 'one-half' rounded out a little in Roman Greek; and the 'three-quarters' is the final result of writing the two in close succession (CXIX., 2, second century, XCIX. (i.), 56, 57, CIX., A, 18, 25), that is $\angle \acute{c} = ' = \acute{c} / = \gamma /$. The more cursive variations, *e.g.* CCLXVII., col. 18, line 298, are still not inconsistent with such an origin.

The symbol for one-eighth  is doubtless an Eta of that peculiar form

¹ CCCCLXXVIII., 6 offers an exception.

Hultsch's review of it in *Berl. Wochenschr.* 1894

² Diophanti Alex. opera, ed. P. Tannery, and p. 805.

which is common in MSS. 50-150 A.D., but it is clearly used as a symbol, as may be seen by a comparison with the forms of the letter around it, which never attract it out of its distinctive shape as a numeral. Cp. CXIX., 52 (where $8\frac{1}{2}$ occurs).

The occurrence of $\beta = \frac{2}{3}$ in CCXC. (A.D. 85), 7, CCLVI. r. (early first century), 16, CLXXV., 7, is a return to the original formation of the symbol, after the corruption of β into o, in many examples. Cp. $\chi^o = \chi^\beta = 2$ chalci¹ and corruption of Delta into the same form in o¹ = 4 chalci. Revillout, *Lettres sur les Monnaies Egyptiennes*, p. 172, prints this symbol Δ , but gives the same explanation of it. He adds \bigcirc , to which he gives the value $\frac{1}{3}$ of $\frac{2}{3}$ or $\frac{2}{9}$. Perhaps this is a mistake for $\frac{1}{3}$ of 2.

The ordinary numerals Gamma, Epsilon, etc., with an over-written vertical, are used for $\frac{1}{3}$, $\frac{1}{5}$, etc. There are, however, several Roman varieties of the over-written mark. Cp. Fay. Pap. LXXXII, 16. Note the symbol for $\frac{1}{5}$ Fay. Pap. LXXXVI., 2, resulting from the close collocation and subsequent combination of the $\frac{1}{2}$ -symbol and the Gamma = $\frac{1}{3}$.

The symbols of the formula 'one per cent.' and 'two per cent.' are questionable. The appearance of the sign in CCCVII 2, might suggest, for explanation, a reference to the vertical over-written stroke found in Ptolemaic fractions (cp. p. 146 n. above) since these 'percentages' are the fractions $\frac{1}{100}$, $\frac{1}{50}$. But the form of the sign in the same formula in CCVI. d. (second century) 2, 3, raises a doubt, since there there is the more familiar undulating vertical crossed by a horizontal bar (Kenyon, *loc. cit.* note).

As in Ptolemaic so we find in Roman papyri the character Sampi as a numeral = 900 (CXCIII., 20, CXCIV., 93 etc.) and Koppa = 90 (CXCIII., 54, CXCIV., 10). Note the form, q-shaped, in Oxy. Pap. XLIII. recto ii. 23.

The symbol \angle = (at least in some places) $\acute{\alpha}\nu\acute{\alpha}$, has been treated under the head of its Ptolemaic occurrences (p. 142 supra) and again (inf. pp. 166 sq.) in the consideration of the horizontal bar = Nu.

Rho surmounted by a small Chi occurs (= $\acute{\epsilon}\kappa\alpha\tau\acute{o}\nu\tau\alpha\rho\chi\omicron\varsigma$) in Roman papyri. Vide Fay. Pap. XXXVIII., 1; CXXXII. 4. Once a symbol † replaces it in the same formula B.M. Pap. C'CCXLII, 1, cp. Cat. II. p. 172. Have we here a reminiscence of the curious symbol of the Pet. Papyri (*supra*, p. 137)?

While, as already stated, the Ptolemaic right-angle for 'year' survives in Roman papyri, with no noteworthy change of form,² a chapter might be written

¹ The Edd. of the Fay. Pap. LVI, 5, 6 LVII, 5, resolve χ into $\chi\alpha\lambda\kappa\omicron\upsilon\ \delta\beta\omicron\lambda\omicron\iota$. Perhaps the explanation is that when used alone, the collocation is to be read in this way, but that when following o' = 4 chalci as B.M. Papp. CCCXII and CCCLXXI, it adds 2 chalci, making up the 6 chalci.


² We have in Roman papyri the three common variants: (1) the plain right angle resting on


one side of it; (2) the same with its vertical member curved, 2-shaped; (3) the same again, but with the concave of the curve looking to the right. Both the (2) and (3) may be seen in CCLVII A.D. 94 and C'CCXXIV A.D. 161. For comparison of the last with its curvilinear degenerates C'CCXIV 25, 26. Grenfell and Hunt print other variants \perp (Oxy. Pap. Vol. I. p. 263) and \angle (ib. vol. II. p. 337).


on the very compendious formulae, equivalent to compound symbols, which are formed, in such papyri as B.M. CCLX., by the juxtaposition of numerals and this symbol, *e.g.*, $\epsilon\pi\iota^{\epsilon}\theta^{\iota}\delta^{\iota}\iota\beta^{\iota}$. = $\epsilon\pi\iota\kappa\rho\iota\theta\epsilon\iota\varsigma\ \tau\hat{\omega}\ \theta\ \epsilon\tau\epsilon\iota\ \kappa\alpha\iota\ \epsilon\nu\ \tau\epsilon\sigma\sigma\alpha\rho\alpha\kappa\alpha\iota\text{-}\delta\epsilon\kappa\acute{\epsilon}\tau\alpha\iota\varsigma\ \tau\hat{\omega}\ \bar{\iota}\beta\ \epsilon\tau\epsilon\iota$, (cp. col. 5, lines 65-70). But such a section could do no more than repeat the conclusions of the Editor, and the difficulty lies in the interpretation of the formula rather than in the decipherment of the symbols. In the MS. just quoted, in particular, these symbols, numeral and 'year'-symbol, alike, are, though somewhat rubbed, clear enough and of the normal forms, so that, without passing beyond the limits laid down for this monograph, one would hardly be justified in devoting space to their discussion.

The 2-shaped cursive form which in Ptol. MSS. is $\bar{a} = 1000$ (sc. drachmae) recurs in CIX B fr. 2 line 45, CXIX. 6, 9, 13, 17, 29, 40, 42, 48, in a scribbled $\acute{\alpha}\pi\acute{o}$. Wilcken thinks that it is not a symbol, and it may be pointed out that there is in the Roman symbol a closer resemblance to that word curatively written than in the Ptol.: the Omikron is in some cases quite distinguishable, though, as it is not always found, the circle may be nothing more than an occasional flourish (cp. CXIX. 56, where the ordinary cursive word is found in the same context).

Side by side with it, 2 = 1000, B = 2000, &c. survive in Roman papyri, though in CXCVI. (second century) 27, 35, 36, 40, they are found with an addition, a hooked horizontal interlaced α -wise with the hook which was once the circumflex.


The Aroua-group. The normal type of this is no doubt better seen in the form  (CXCH in almost every line, CXCV, 4, 5, 7, 9, 10, CXCH, 1, 33,

35, 37 *et passim*—all first century) than in  (CXIX. 1, 2, 3, *et passim*, CXXI. r. 88, 95, 100, *et passim*, CCLXVII. 3, 16, 22, CIX. A. fr. 2 lines 18, 23, 25, 51, 52, *et passim*, Fay. Pap. XXIII. (a) 7. 9. For although the former can hardly be a direct descendant of the Ptolemaic symbol ζ, so different is the general appearance, yet the same elements are perhaps to be seen, viz. Alpha-Rho, transformed however by the adoption of an Alpha of later date, which now appears mutilated, as the initial hook in both these Roman symbols. The absence from one of a final hook to the Rho-stroke would then favour its claim to be the more normal form. The horizontal bar, marking abbreviation, appears in each, but in one a ligature binds it to the tail of the Rho, so disguising both elements. This tendency to write the Rho-tail and the ligature all as one stroke is illustrated in CXIX. 1, 2, 3, where in 3 especially the whole appearance is almost that of a copy-book

capital E, scil. , joined to a following horizontal; and the progress of the mutilation is confirmed from the example in line 56 of the same papyrus, which has already (second century) lost the initial hook. A final Byzantine form which appears to be quite regular in CXIII. 8 c. (seventh century) is an

uncompromising straight vertical with a bold loop joining it at half way, where the horizontal starts; cp. below p. 172 sq. Further, the simpler, the presumably normal sign is found in MSS. which are earlier, without exception I think, than those which show the more degenerate, that is, the rounded and ligatured form: certainly the earliest (Pap. CXCV) of these first century papyri has the simpler form of the symbol, the ligature appearing first in CXXXI. (78-79 A.D.).

The symbols which are found in the familiar collocation *πυροῦ ἀρτάβας* demand a detailed investigation, as several considerations render it complicated. In the first place the two distinct symbols which originally formed the constituent parts are used inconsistently and confusedly; the whole composite symbol is found sometimes for the *πυροῦ*, sometimes for the 'artabas'; sometimes the original formation seems lost to sight and new strokes are introduced; and to add to these difficulties of application, there is the confusion of the form of this symbol, with the Ptolemaic 'metretes' in the MSS. and some overlapping of the variants in the printed lists. It will hardly be profitable to attempt an analysis of all the minor discrepancies to which these difficulties have given rise. It is better to go back to the MS. forms and endeavour to trace their development. To begin with the ϖ , which has a history of its own, apart from the part it plays in the composite symbol. If $\varpi = \text{ἀρτάβη}$ (Fay. Pap. LXXXV. 39) is analogous to $\varpi = \text{οὐλῆ}$ (CCLIX. 77, 80, 89, 99 &c.) and $\varpi = \text{ὁμόως}$ (CCLIV. v. 17, 27, 43, 44, 45, *et passim*), explanation is simple: it is a mutilated Alpha surmounted by a lengthened abbreviation-mark. This explanation receives confirmation from the fact that (*c.g.* in CCCXLVI a and b) this abbreviation is found just where an abbreviation as distinct from a symbol would naturally occur, viz. in the cursive statement of an amount which commonly precedes the duplicate statement in symbols. Compare these parallels and note the variants: B.M.

Papp. CCCXV. *πυρου αρταβας τριακοντα*  λ; B.M. Papp. CCCXLVI.





πυρου ϖ *τρίς* $\iota + \rho$. Here clearly $\iota + \rho$ is the symbol standing for *πυροῦ ἀρτάβας*, while ϖ is regarded by the writer as ordinary cursive.¹ In another place, CCCCLXIX. b. 5, we have *οροβ*² *αρταβ τρις* ϖ γ where the distinct ϖ has passed over to the symbol side. As this papyrus is late second century (Kenyon, Cat. II. p. 86), the use here of the abbreviation may be regarded as typical of what I think is the transition stage; in which we see the simple cursive ϖ of earlier Roman MSS. used among the symbols, but without having lost its distinctive form. A little later, at the beginning of the third century, it has amalgamated with part of the mark which in various shapes introduces it,³ and thus we have a symbol of the type of CCCXV.⁴ where the simple ϖ is still very consciously written, though the vertical already crosses

¹ In CXCV col. 4, line 82 it apparently is among the symbols.
used for *ἀρταβῶν*.

² *ὀρόβου*, a kind of vetch or pulse.

³ The *πυροῦ* ordinarily not being represented later.

⁴ This is dated 150 A.D. so that the use here is an anticipation of what became general

variants are sometimes unmistakably of this same type: those e.g. in CIX. B. fr. 1 (15, 30, 32, 59, *passim*) having as their variation only the omission of any mark to represent the Omikron, or Upsilon, and occasionally a carrying-round of the lower hook into a loop joining the horizontal (e.g. 60). In CCCXV (150 A.D.) the variation has affected the other member, so that the whole appears as a simple vertical, struck through the left-hand tip of the artabe-abbreviation, this vertical having, attached to its tip, a stroke which is in some cases like a simple ligature (cp. 10, 13, 18), in others a second horizontal, written by a separate stroke of the pen (cp. ib. 15). This additional stroke is in many cases the mark which introduces a group of symbols commonly repeating a value already expressed in words, the *γίνεται*-stroke. Before the end of the century, the composite symbol has taken the form of a plain cross, 'plus'-shaped, (cp. CCCXLVI, a and b A.D. 194) which now, and in the third century, is preceded or introduced by new additional signs of various forms. In CCCXLVI, just referred to, it is a vertical stroke, almost straight, with a very slight hook at the top on the left and at the bottom on the right: in CCCLI (A.D. 218) it is a horizontal undulating ~-shaped (line 11) or a ragged stroke somewhat similar (line 12). In all of these there is perhaps something reminiscent of an original *πυροῦ*-symbol, now absorbed into the vertical of the cross, but in CLXXX (A.D. 228) it is a plain detached horizontal (8. 13) or a similar stroke, often ligatured to the vertical.¹ This additional preceding stroke, introductory to a group of symbols, has been the cause, as already explained, of considerable confusion, both in the MSS. and (consequently) in the Editions. Such an example as CLXXX, 12, shows its normal use with artabe-symbol very clearly *πυρου αρταβας τριακοντα διμυρον* / +. λβ' as contrasted with the simple 'artabas' alone, the + alone or followed by the o, as in B.M. Pap. CCCXXII where many variants enable one to estimate to some extent the probable limits of this variation. Finally, to anticipate a little, we have in fourth century papyri, strange forms such as  or , (XCIX (i) col. 2, 3, 4, and fresh confusion such as ,  (CXXV (i) 1, *et seq.*) Other illustrations may be seen in CXCH, CLXXV, and CXCIV, all first century, CCLIV, second century, CLXXXVIII, third century.

Pap. CCLXVI, 40, has a sign exactly resembling one form of the Artabe-symbol, a horizontal line with a small circle written beneath it. This sign here indicates that what follows is the 'net' total (Kenyon, B.M. Pap. Cat. II, 234). It is hard to imagine what the circle (or dot) could be. The horizontal however is not strange as a variant of /: there is a general tendency of vertical or nearly vertical strokes to take a more horizontal position; and the very stroke in this position, signifying 'gross' total, occurs, without the subscript, in this same papyrus, *passim*.

¹ The Omikron circlelet attached on the under side to the right hand end of the line, reappears, and survives to Byzantine papyri. Cp. in the Abinnaeus papyri, CCCXXVIII nearly

40 occurrences, CXXLIX, 20, CCXXXVI, 4. In CCXVII, 16, (3rd cent.) it is placed above the horizontal.

The Roman forms of the Talent-symbol. These are, ordinarily \succ (Oxy. Pap. XLIX, 18; CCXLII, 28 etc.), and \succsim (*id.* CCXXXVII, iv., 14, etc.)

The latter is a more cursive development of the former, itself at a similar stage in relation to the Ptolemaic two-membered form. Still more degenerate forms may be seen at *id.* LXXXIV, 17; and perhaps LIV, 18.

τ (= *συμβολικόν*, a tax the nature of which is undetermined), is hardly a symbol, though noted by the Editors of *Fay. Towns and their Papyri*, p. 347, among the symbols. It is a Sigma of the second century, with common over-written sign.

It would be better to defer judgement on the small, faint and very cursive writing of XCIX, a mutilated and very fragmentary fourth century papyrus, which shows symbols, apparently for *νομίσματα* and *κεράτια*, which are quite unfamiliar.

ζ = *διά*. The earlier explanation = *καί* seemed very probable (Kenyon, *Pal. Gk. Pap.* 1899, Ap. iv), for in CIX B fr. 2, the ordinary cursive *καί* is written in such a way that the omission of the final iota actually leaves this 'symbol.' Cp. line 45 with 46; and 55 with 59. Dr. Kenyon now accepts Dr. Wilcken's explanation above given, which he thinks gives better readings.

\wedge A symbol or sign thus printed in the Cat. of Brit. Mus. papyri is unexplained. The Editor suggests the meaning π (for *προσδιαγραφόμενα*). Curiously, a somewhat similar but *double* angle of this kind is also unexplained among Ptolemaic symbols. *Vide supra* p. 151.

The short horizontal over the final letter of a word, and especially of a line (XLVI, 140, 146, 150, 155, *et passim*) has sometimes the value Nu. It quite commonly indicates other letters, but not other *single* letters, except $\delta\tau$ = *διά*. I cannot produce one, and there is not one in Kenyon's 1893 Index of Abbreviations (Cat. Gk. Pap. Brit. Mus., pp. 253-5) and the 1898 Catalogue has only $\tau\tau$ = $\tau\eta$ (CCCXXV. a) which proves on examination to be hardly a case in point, the addition being merely a prolongation of the cross-bar of the Tau. In the case of *ἀνά* the horizontal = Alpha drawn above the Nu is undeniable, but then the Nu is much mutilated, so as to give the whole value and appearance of a symbol, and the Ptolemaic angular Alpha is replaced by a single bar apparently only when the latter is immediately followed by and joined to the vertical flourish which signifies 'drachmac.' Moreover this occurs in a common formula '*@* drachmas x.'

A similar sign for a single final letter over-written is the sometimes cup-shaped angle representing Upsilon. See CCCXXV. b, where it occurs twice in the genitive ending Omikron-Upsilon, in each instance resembling a large modern 'tick.'

Quite alike often are the symbols which consist of a double horizontal, viz. for 'two-obols,' for 'Arouras,' and not infrequently for 'talents.' The 'talents'-symbol is generally easier to distinguish, but it is often loosely

written both in Ptolemaic and Roman¹ papyri, and the 'two-obol'-symbol tends constantly to the same shape in Roman MSS. (for extreme form (CIX., 46); the similar 'Arouras,' which is rare, is Ptolemaic only. But here again it must be observed that the meaning is commonly kept clear by the context alone.

Obol and Chalci symbols. Concerning these there is little to add to the account given of them in the Ptolemaic section, and earlier in this. Drs. Grenfell and Hunt, in indexing the Fayum Papyri, give (p. 347) three symbols each = ἡμιόβολον. Of these the first and third, as I have elsewhere explained, are properly 'one-half' signs; the middle one, printed as 6-shaped, is properly directly connected not with 'obols' but with 'chalci,' being a roughly-written cursive Delta, surmounted by a vertical stroke = 4 chalci. Thus *in practice*, though not as regards intrinsic meaning, all three are rightly described as symbols for the half-obol. These instances from the Fayum papyri are all of Roman date. All the obol series recur in the period (Fay. Papp. XLI., 11, 17; XLIV., 10, 11, 13; LXXXVII., 1, 10, 13, etc.).

A rare sign is a kind of rough breathing-mark (XLVI., 9, 60, fourth century). A species of diaeresis-sign, consisting in one MS. (*id. passim*) of a dot followed by a tiny horizontal may be a variant for the rough breathing in some places; *ibid.* 165, ὑπό and ἴνα 164, 175, 239, 265, 299, 304, CXXI., 224, 927; but cannot in others; *ibid.* 147, 201, 266, 269, 610, as it is found (only over Upsilon and Iota) in places where there is neither breathing nor diaeresis required, and where it seems to be a merely fanciful addition to the vowel. The sign is moreover omitted from most of the Iotas and Upsilons even of this MS., a magical document, and in very few papyri does it occur at all. In Pap. CX., a horoscope of the second century, it is used occasionally over every initial Upsilon and Iota, regardless of diaeresis and of aspirate.² In CCCXXXII. a bar replaces the two dots.

The two signs last mentioned, like others next to be quoted, hardly belong to the science of symbols. Such marks as *e.g.* a 2-shaped curve in XCIX. (i.), col. 4, *ibid.* 19, 23, seem due to the momentary freedom of the pen.

With better right perhaps has another class a proper place here, viz. monograms. These are formed, like the ornamental monograms of modern and mediaeval times, by the crossing or interlacing of two or more letters. The letters, however, in ordinary papyrus-use are nearly always³ the first two or three letters of a single word. They are of the nature of symbols, the more so as the type of letter employed is rigidly observed, and is often quite different from the ordinary forms of the MS. The following is a fairly exhaustive list, almost confined to magical papyri: Ϻ = γράφε, ϻ = γραφόμενον, ϼ = δεῖρα, and cases (which remain rigidly triangular whatever be the shape

¹ For the latter, see Fay. Pap. XXI, I (a) 9, 10, LXXXVII, 1, 10, 13.

² Sir E. M. Thompson remarks that the πνεύματα are not found in early Gk. MSS. before the 7th cent. and did not become rounded until the 12th cent. Gk. and Lat. Pal. pp. 71, 72).

³ Exceptions are to be seen in the rare arrangement *e.g.* Ϟ = δεκατάρχης (Oxy. Pap. LXIV, 1); and ϧ = εκατοντάρχης (*ibid.* LXII, 1); the numeral has the MIDDLE letter of the αρχής written over it (Cp. Genév. Pap. No. 35, etc.).

of the cursive Deltas around it), Ⲕ = ζμύρναν, Ⲕ = ζμυρνομέλανι, ⲕ = νίκη, or νικητήριον, ⲡ = ποίημα, Ⲣ = πρῶγμα, ⲣ (sometimes ⲣ) = πρόσ, Ⲙ = χειριστής, ⲙ = χρηματίζειν or χρῆσθαι, ⲙ = χρίε or χρίσον, ⲣ , ⲣ = πρόβατον, Ⲕ = διπλοῦν. Except the last three, these are almost all *magical*. Another

exception is Ⲣ = ἑκατονταρχία, CLXXVIII. b, a copy of a deed of A.D. 145. Of this kind (the Iota, however, not far removed from the simple subscript) is the Delta-Iota which occurs in a regular form as *e.g.* CXIX., Ⲕ , 15, 36, 44, *et passim*. More doubtful is Ⲕ (XLVI., 200, 217, 455), which should mean λαβέ. In Oxy. Pap. XLIII., recto, i., 1, it means λίτρα, and so often (Edd. Index in Vol. I., p. 263). Grenfell and Hunt index a similar symbol (Fay. Pap. L, 5) as ὑπέρ (?). Merely superscript or subscript letters are not included.

There remains the large class of *magical* symbols. But of these only four or five can be positively classed as Greek (see Kenyon Pal. of Gk. Papp. Append. IV.). Of this small number the symbol for ὄνομα is common. It appears generally as a small square (sometimes two squares for the plural) with or without a dot in the centre. As to its origin, I can only produce, for what it may be worth, a late example from the fourth century pap. CXXII. There a hint of its true formation may perhaps be seen in 6, 43, and 46; the construction is a roughly shaped Nu ?, surmounted by a horizontal bar, and containing a dot = Omikron.¹ This would be quite on the principle of the monogram plus ordinary abbreviation. Still, little can be inferred from such premises, especially as the writing of other 'onoma'-symbols in the MS. *e.g.* lines 55, 59, 60 is quite different, and negligent too.

The symbols for ἥλιος, for σελήνη, and for σκήπτρον (or Ἑρμῆς) are conventional graphic representatives of the objects named. The monogram formations which occur have already been given. It has been a labour of considerable magnitude to examine in detail the remaining symbols, arranged in elaborate figures and formulae which bulk so largely in Greek magical papyri. My only regret is that the result, as far as proven Greek symbols is concerned, is very meagre. The most important is a single tiny line of tachygraphy which occurs Brit. Mus. Pap. CXXI. col. 14, line 27 (third century). For explanations *vide* Wessely, *Ein Syst. altgr. Tachygr.* pp. 9-10; Foat, on old Gk. Tachygr. in *Journal of Hellenic Studies*, Vol. XXI. 1901, Pt. II. It follows a cryptogram, and seems to complete one of the ordinary formulas (λαβὼν χαρτίον ιερατικόν, &c.) of instruction for the preparation of a spell; the first half being written in cryptogram, and the latter half fantastically varied by use of tachygraphy; though there seems no reason for the presence of either. The existence of a similar script in the Leipzig Tachygraphic fragments (cp. Fr. 21, line 5; Fr. 22, lines 9, 10) confirms, to some extent, the tachygraphic portion; but in any event, it is a direct intro-

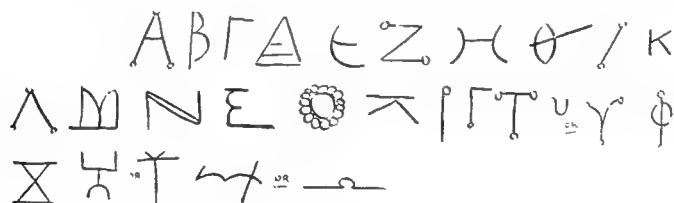
¹ CXXI, 927 has a cup-shaped dot which may be part of a conscious Omikron.

duction of a writing quite foreign to the hand of the MS. and leaves no traces among the symbols of its context.

Then there is the mystic line, explained as a cryptogram, viz.

/κλψζωξθπθολνονηωνυθ↑ψζλνζε↑α?

which has been shown by Wessely (*Ein Syst...* p. 9) to be in the Greek language. There are anagrams or palindromes, and special dispositions of letters with secret meanings, but not involving symbols. On the other hand, a veritable *mélange* of characters, in which Greek uncials, Coptic letters, and hieroglyphics are mingled with fantastic drawings of whose meaning no hint can be gained. These apparent jumbles are frequent, sometimes made more mysterious by arrangement in rough geometrical figures, in pyramids, &c., arrangements which may add something or may add nothing to the meaning. Among them are a few which may be profitably discussed. Thus (in Brit. Mus. Pap. XLVI., CXXI. in spells and formulas, *passim*; &c.—see Cat.).



which I have gathered together and arranged in this order, may very well be the letters of the Greek alphabet, or fantastic substitutes. So /, —, o, ⊗, may be ancient forms of numerals (Cp. *Ann. Brit. School at Athens* 1899–1900, No. VI. on Plate 11, sunbaked clay tablets found at Knossos) units being the upright lines as in Egyptian, tens the horizontal, hundreds simple circles, and circles with crosses in them thousands.

γ may be a Coptic letter.

Such a spell as CXXI., 196 ωΑΤΤΨ ρ ρ ρ "Ξ Ζ Ψ . . etc., which is to be written *εν χαρτη καθαριω* and applied 'εν τω τοπω εν ω η πληγη' (sc. of a scorpion), may be consistently in Greek throughout, so that we should read the formula: *ὦ δεινα π π δ' ὄνομα δεινός ρ ρ* (or *Q=90*) *σ...ζ δ' ὄνομα*, etc. But there are great risks attaching to such interpretations arising from the possible presence of quite foreign, but accidentally similar characters, permissible and indeed to be expected in documents of this kind.

On the boundary line between symbols and ordinary cursive are such phrases as *καὶ παίδων*, already illustrated, a recurring addition to the formulas for labourers, or of beasts employed in accounts of works, an addition naturally of the commonest kind which often (*e.g.*, CXXXI, 71, 76, 82) bears only a general resemblance to the fully written words. *Kaì* is naturally specially subject to this mutilation, repeatedly occurring as a u-shaped Kappa-Iota. In some instances the third of the three strokes is followed by the common vertical undulation. This at least is one possible explanation, and the third

stroke would then be the ligature, which is freely used in this class of cursive: cp., e.g., $\Omega\tau\omega\tau$ = $\pi\rho\omega\tau\omega$ (*ibid.* 6: cp. CCCXV. 11) where the ligature between Omega and Tau is drawn as a curve exactly repeating the first two curves of the Omega. But another explanation is equally defensible. I prefer to regard the vertical undulation as an Iota, written loosely as in several other cursives, e.g., in $\Delta = \delta\iota$ $\zeta = \epsilon\iota$, of which the small papyrus last quoted gives examples.

Thus a kind of compensation for the mutilation or curtailment of cursive phrases is to be seen in the influence of ligature, which introduces *otiose* strokes and curves for the sake of a continuous script in which the pen is lifted as seldom as possible.

BYZANTINE SYMBOLS.

Byzantine palaeography has practically to deal with non-literary manuscripts, so far as papyri are concerned (Kenyon *Pal. of Gk. Pap.* 1899, pp. 112, 114). Their sematography adds very little to what has already been said, and very few new symbols to the general list.

In general, the same characteristics of the symbols appear, as already demonstrated of the Ptolemaic and Roman periods, and the same methods yield similar results. So that it would seem that an invented and consciously developed system of symbol writing does not find its way into ordinary Greek writing until the papyrus has given place to vellum.

S is the conventional shape of the printer's type used for a symbol which is seldom truly S-shaped. Cp. CXIII, 5 (c), lines 3, 5; CXIII, 7, lines 2 *et seq.* The true S-shape has however, occasionally appeared much earlier, cp. CCII, 3, (late first cent.) CCVI b. (second cent.) *passim* where it stands for drachmas. When written proportionately with other letters, it is the perpendicular flourish, undulation, or zig-zag of Roman papyri, in an extremely broken-down form, which is sometimes as diminutive as an ordinary cedilla (in modern French) which it then very closely resembles.


In its strange variants it is easily confused with some ordinary strokes of the writing which is now sometimes very cursive, e.g. with Epsilon-Iota (CCXXXVI, 2; CCCIII, 27) with Alpha-Iota (*ibid.* 5).

Of such a form exactly is this stroke, with the meaning 'and' in CCXLIX, 10 (cp. Oxy. Pap. CXXVII, 4) and with the meaning 'one-half' in CCCXXVIII, 8, 22, 23.


Used as the simple sign of abbreviation the common vertical undulating stroke retains its use and form (*ibid.* 3; CXIII, 7, line 2) to the end of the papyrus period. Another form of it, however, seems to rival it, viz. the straight oblique inclined to the right, and struck just beneath the final letter of the unabbreviated part. In e.g., CXIII, 7, this is so bold a sign that its numerous occurrences give to the page the appearance of a heavy sloping hand. In CCXLII, 22; CXLI, 25; CCCIII, 6, this appears *doubled*,¹ to

¹ It is used apparently with a plain numeral CCXLIX, 32.

mark a numeral used adverbially. Combined somewhat fancifully with the ordinary flourished letters of the period it gives symbol-like effects, *e.g.*

 = $\pi\acute{\iota}\theta\omicron\varsigma$ (?) (CXIII, 8, [a]).

The same tendency to write recurring groupings of letters as phrase-symbols is to be noticed in this period also, but the prevailing elegance of the style of the period produces in such phrasing graceful intertwined effects which are often delightful to the eye, *e.g.* CXIII, 7, line 2 :

 = $\delta\epsilon\chi\theta\acute{\epsilon}\nu\tau\alpha$.

They are capable of becoming obscure, without losing their prettiness *e.g.* *ibid.* 3 *et seq.* $\alpha\gamma$ = $\kappa\omicron\upsilon\rho$; *ibid.* 9 (e) η = $\alpha\iota$ or to take a formula, one *ibid.* 8 (a) 21 :

 = $\nu\omicron\mu\acute{\iota}\sigma\mu\alpha\tau\alpha$ $\xi\theta$, $\kappa\epsilon\rho\acute{\alpha}\tau\iota\alpha$ $\&$ ξ ,

or 69 dr. $9\frac{3}{4}$ keratia.

The 'one-half' and the 'one-quarter' symbols $\frac{1}{2}$ and $\frac{1}{4}$ (CXIII, 5, (c) line 33) have taken by this time (A.D. 600) slightly new forms. For the former, the older (Roman) vertical undulation is now sometimes ¹ surmounted by the double dot, apparently diacritic, which plays a large part in mediaeval sematography. For the latter, the true formation of the older symbol has been lost in a (modern) Delta-shaped character, but distinguished by a cross-bar on the extended arm. The new coinage in which the last mentioned sums are reckoned, has for (?) $\kappa\epsilon\rho\acute{\alpha}\tau\iota\alpha$ a symbol γ (CCCC, 4) which is just possibly borrowed from some system of tachygraphy. The Kappa and the Epsilon of this shape are found in later tachygraphy, *not* however in that of the Rainer papyri of this period (cp. Wessely, *Ein Syst. altgr. Tach.* Taf. I, No. 9, row 11). As moreover, the symbol is quite as reasonably to be derived from a half-formed cursive Kappa, its claim to be tachygraphic may be doubted.

In B.M. Pap. CCCXCIII, 3, 2, the statement in duplicate has γ in the place of $\pi\alpha\rho\acute{\alpha}$. This, being of the sixth-seventh century, may possibly be a borrowing from the same system of tachygraphy as set forth in the Rainer tachygraphic wax-tablets. Unfortunately an example of $\pi\alpha$ does not occur, though in the fragment numbered 3 by Wessely (*Ein Syst. altgr. Tachygraphie* Taf. II) the sign γ = $\alpha\pi$ occurs. The inversion of the letters would, it would seem, be γ or \angle but it would be consistent with the general methods of the system if γ should mean $\pi\alpha\rho$ (Cp. γ = $\alpha\iota$; and the circle of the Rho disappearing in γ = $\alpha\rho$ Taf.). The actual occurrences of $\pi\alpha\rho$, etc. Taf. III, no. 10, however are inconsistent with it, so that, having at hand the simple abbreviating stroke, I should prefer to adopt it as the explanation.

γ = $\acute{\upsilon}\pi\acute{\epsilon}\rho$, CCCXCIII, 2, 3, (sixth or seventh century) and an interesting variant occurs CXIII, 9, fr. e. So many monogram-formations of this kind

¹ CCCXXVIII for instance, one of the Abinnacus papyri, has not the dots (S, 22, 23).

occur (cp. π = $\pi\rho\acute{o}s$ where also a single stroke represents the Pi) that it would be, I fear, only a far-fetched explanation which would introduce tachygraphy.

The aroua-symbol ┐ has lost its upper hook and is a straight, vertical bar with a belled loop which generally is carried back to touch the bar; there is still the horizontal, regularly connected to the following numeral. Cp. p. 162 above.

The artaba-symbol. Allusion has been made (p. 165 *supra*) to some widely variant forms in the fourth century papyri. To them we must add CCXXXVI. 4, where a new but quite possibly accidental hook appears,¹ the form being otherwise quite normal, the small circle even being in its oldest position (cp. CCCCXXVIII. nearly 40 occurrences). But CCXLIX. of the same (Abinnaeus) group, has at line 1, two strange variants of ┐ .

There are no other occurrences, I think, to confirm them. In later examples too the small circle or dot takes new positions, while two and even three circles are found *e.g.* Oxy. Pap. CXXVII. (late sixth century).

┐ = $\tau\acute{\alpha}\lambda\alpha\nu\tau\alpha$, found in the Abinnaeus group (CCCCXXVII. 14) is quite new and unexplained. It may be the old 'year' symbol transferred to this meaning, or may be a borrowing from tachygraphy. The sixth century tachygraphic fragments already quoted show ┐ = $\alpha\tau$, and ┐ as the first of a group, which is almost certainly $\tau\alpha$, $\tau\epsilon$, $\tau\eta$, &c. The difficulty of the date is a grave one, for it would rather be likely that the tachygraphic symbols were themselves adaptations of the older symbols, there being nothing to confirm the sixth century Rainer-forms for earlier centuries.

There is the 'Sign of the Cross' now commonly found in even commercial and legal documents. It is variously shaped, its vertical being sometimes hooked, now on the left (CXIII. 4, line 18) now on the right-hand (*ibid* 28). For the plain form, see CCCCXXXIII. line 1. In CCCCXIII. it is drawn in the margin against the text $\text{Ο κυριος ο θεος φυλαξι (sic) σαι (sic)...ερωσθαι σαι εν κω}$, but often the context is quite secular, legal or commercial.

In CCLII. 1-20 a X with the oblique line, already seen, drawn through it, represents Sextarii.

$\text{X}\mu\gamma$ which occurs oftener alone, but sometimes with ζθ , $\text{X}\mu\gamma\text{ζθ}$ (CCCCXXXIII. (i)) seventh century is more a cryptogram than a symbol. Wessely suggests Χειρός μου γραφή for the first three letters, but Kenyon thinks this unlikely, as the letters are not in the same hand as the rest. He thinks it more probable that it is of the same form as ζθ which is explained to mean $\alpha\mu\eta\nu$ (thus $1+40+8+50=99$ or ζθ). Other explanations are $\text{Χριστός Μαρία Γαβριήλ}$, and $\text{Χριστόν Μαρία γεννή}$.

* In the document just quoted (line 8) and again in CXIII. 6 (a) line 10, a large six-pointed star-shaped character (a Chi with a line across it) is found as an abbreviation of $\chi\acute{\alpha}\rho\epsilon\iota\nu$.

¹ And may be due only to a kind of attraction to such forms with ordinary ligatures as in CCXLIX, 20.

NOTE ON THE SYMBOLS OF LITERARY PAPYRI.

It is in deference to the general practice that the distinction between literary and non-literary has been preserved in this treatment of the symbols. For in the sematography the division is hardly useful, as, if we except those manuscripts (notably the *Ἀθηναίων Πολιτεία*, the British Museum medical manuscript, and the astronomical treatise of Eudoxus in the Louvre) which, though literary as regards the nature of their contents, are not written in a book-hand at all (Kenyon, *Pal. of Grk. Pap.* p. 56), we might fairly say that the literary papyri do not use symbols. So great, however, is the palaeographic and general importance of the literary papyri, and most of all, as it happens, of that papyrus above mentioned which uses abbreviations the most freely, that it seems better to defer these for separate consideration. Somewhat different questions are involved and Dr. Gitlbauer has, in a series of articles in the *Archiv für Steuographie*, 1901, expounded a system of tachygraphic abbreviation which he claims to trace in the *Ἀθηναίων Πολιτεία*, and believes to be directly related with formal tachygraphy then current in Greece. An opportunity having now been offered me to discuss the matter at length in the same *Archiv*,¹ I omit from these pages what might seem an inadequate treatment, the more readily because I think it has not properly a place at all here. For after a careful examination of the original papyrus forms, I am convinced that the genuine symbols peculiar to Greek literary papyri (for list of symbols and sigla see Kenyon, *Palaeography of Greek Papyri*, Appendix IV) are reducible to three, viz. $\epsilon\sigma\sigma\iota\nu = \epsilon\sigma\sigma\iota\nu \setminus = \epsilon\sigma\sigma\iota\nu$; and if any non-literary papyri yet unexamined should as I anticipate contain these three also, then this tiny list will vanish altogether. As regards their origin, I reluctantly accept them as arbitrary (perhaps related with the tachygraphic η); they would thus stand almost alone as pure symbols of arbitrary origin found in old Greek.²

F. W. G. FOAT.

¹ In the May number 1902. Dr. Kenyon, the first editor of the papyrus, has kindly read the manuscript of this article, and expresses his agreement with the general conclusion

thereof.

² Apart of course, from pure continuous tachygraphy.

CYZICUS.

[PLATE XI.]

WHILST travelling in Asia Minor in 1900 I paid a cursory visit to the peninsula of Cyzicus on the Propontis, in ancient Mysia, and had the opportunity of examining the site of the ancient city, and the canal that has been the subject of considerable controversy in bygone ages, and about which the facts are still only partly ascertained. As the site appeared to promise results of peculiar interest, I applied for a concession to excavate it. I had the good fortune to obtain an Imperial Iradé in February, and began tentative operations in May.

From the Admiralty Chart it will be seen that Cyzicus lies on the 30° long. east of Greenwich, and 40°22' N. lat. and within easy reach of Constantinople. To Panderma there is practically a daily service of steamers, which leave Constantinople at sunset and arrive at about four o'clock the next morning. At Panderma a sailing-skiff takes one in about an hour across the bay to Yeni-Keni, the landing stage immediately outside the walls of the city.

The country has suffered from recurrent earthquakes, and with the blocking up and final destruction of the canal, which took place probably in the eleventh century, the city of Cyzicus seems to have lost all significance as a commercial centre; by degrees it became merely a rich quarry from which to draw material, first for the construction of Byzantine Churches, and after the Turkish conquest, for Mussulman mosques and the extensive arsenal at Constantinople. Panderma, Artace, and other neighbouring towns helped themselves also to the ready hewn marble and granite columns and blocks scattered about the surface, and to the stone of the formidable city walls, which, loosened by earthquakes, offered the finest building material imaginable ready for shipment.

Blocks of marble and columns which were not broken up by the earthquakes, but were too cumbersome to move, were reduced on the spot to the requisite sizes, thus increasing the already large quantity of accumulated *débris*. Owing to the absence of roads and the broken nature of the ground, the whole place became overgrown with a thick brushwood during the centuries of profound ignorance, fanaticism, and barbarism that followed. All sculptures and archaeological treasures not immediately on the surface thus became buried under layers of soil and *débris*, and the deposits of silt from the mountain streams, so that they lie to-day some six feet underground.

The greater part of the material for the history of ancient Cyzicus has been collected by Marquardt in the excellent little work *Cyzicus und sein Gebiet*, which, though published so long ago as 1836, still remains the text

book on the subject. From time to time the site has been visited by travellers or archaeologists who have published notes, such as Pococke, Sestini, Leake, Hamilton, and Texier, but these are for the most part very slight; the most considerable attempt to study Cyzicus on the spot being that of Perrot and Guillaume (*Exploration de la Galatie*, &c. pp. 69-90).¹ Beside these sources of information, there are the Greek inscriptions, of which, from the days of Cyriac of Aucona downwards, an increasing supply has been forthcoming, to be scattered through the pages of some twenty or more publications and periodicals.

In this paper I shall merely record my personal impressions of the present conditions obtaining at Cyzicus and in the neighbouring country, formed on the spot and assisted by a few small tentative excavations and various recent excursions into the district round. My notes also include a series of inscriptions which were either discovered by, or pointed out to me by the villagers, and of which I was enabled to bring home squeezes: the inscriptions form the subject of separate papers following this. I am indebted to Mr. Titus Carabella of Constantinople for much information which he kindly placed at my disposal.

The rough plan shown on Plate XI. was sketched on the spot with the aid of a compass and an aneroid: it will be found to differ in some details from the plan published by Perrot and Guillaume (*op. cit.*, Pl. III.), which I had not with me at the time, but which is stated (*ibid.* p. 72) to have been drawn up in two days.²

As will be seen, both from the Admiralty Chart and from the panoramic view, Fig. 1, Cyzicus is now a peninsula, united to the main-land by a narrow neck of swampy land about one mile wide and three quarters of a mile long. The peninsula is very mountainous, and rises boldly out of the sea to the height of 2,620 feet at its highest point, sloping gradually from the main ridge, which stretches from east to west towards the coast-line. It is sparsely populated, and with the exception of one or two comparatively modern villages in the interior, the country is void of human life. The higher levels are barren of vegetation, whereas the southern coast-line is very fertile and well watered. Along this a few old Greek settlements are still to be found, such as Heraclea, Rhoda, and Gonia, on the west coast; the town of Artace, now Artaki or Erdek, on the south, and Peramus on the east. At the last-named place many ancient customs are still in vogue, and wrestling and other Olympic games take place annually, about Easter. The other villages are recent settlements. Mihania is said to be a nick-name derived from the Greek *Mi-Hania*—‘Not Candians.’ According to local legend, the first settlers emigrated from Candia two centuries ago, but fearing further persecution denied the fact, saying ‘we are not Candians,’ and from this arose the name which is applied to the village to-day.

Ermeni-Keui, the name of another modern settlement, means ‘Arme-

¹ Their stay at the site was limited to parts of three days (Perrot, *Voyage en As. Min.* pp. 92 foll.)

² In the plan, for Demir Kapen read Demir Kapou.

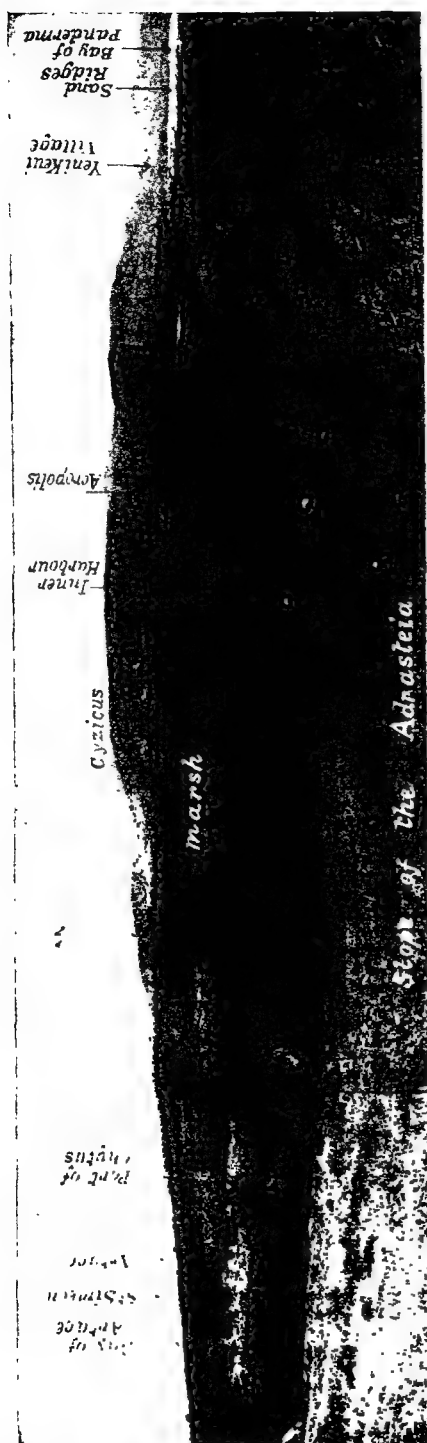


FIG. 1.—PANORAMIC VIEW OF CYZICUS FROM THE MAINLAND.

nian village.' The first settlers came from Persia about 150 years ago, having been driven out from their own country. They seem now to be fairly prosperous.

Yapidji-Keui lies inland, about an hour's travel from the coast, at an altitude of 950 feet above sea-level. It was founded by seven families of Slavs, masons and builders by trade, who came over from Macedonia some time during the eighteenth century. There are now 200 families in the village, which is comparatively well built. The Government, they say, has repeatedly offered them lands elsewhere, but they prefer to live in the hills, which have so far afforded them a safe shelter.

Yeni-Keui, the village on the coast near the eastern wall of Cyzicus, is an offshoot of Yapidji-Keui, and consists of less than fifty families. They are poor, and ignorant in proportion, and have no land beyond that on which the village is built. They depend mainly on the granite quarries for a livelihood. During the German Emperor's visit to Constantinople, when a few streets were paved, there was a temporary boom in the quarries, which are plentiful on the peninsula, though most of them are now closed. Another source of income to the villagers is also gradually disappearing through the wanton destruction of the ruins at Cyzicus, the cartage of the building material from the site, and its shipment to Panderma and Constantinople.

Hamamli lies just above, and to the north of the site of Cyzicus, in a picturesque spot, 275 feet

above sea level. It is the oldest of the recent settlements, having received its Firman from Sultan Bayazid II, at the end of the fifteenth century. The inhabitants, who are purely Mussulman, were granted a considerable amount of land by the charter, and the country for miles around, both on the peninsula and the main-land, belongs to them. They are, however, indolent and ignorant, and notwithstanding their wealth in landed property, and other privileges, seem to lack comfort and prosperity as compared with the people of Yapidji-Keui and Ermeni-Keui. I was told of a curious custom affecting the water rights of the village of Yapidji-Keui. Although the small mountain stream has its source some little distance above the village, the inhabitants are not entitled to use the water more than one day a week for irrigation. For the other six days the water belongs to Hainamli in virtue of its prior rights.

Artace, the modern Erdek, is half Greek, the remainder being made up of Turks and Tcherkess (Circassian) emigrants from the Caucasus. The town was originally a Milesian colony, and is mentioned by Herodotus (iv. 3 and vi. 33) as having been destroyed during the Ionian revolt. It seems never to have recovered from this catastrophe, and by the second century A.D. was merely a suburb of Cyzicus. To-day the place preserves little appearance of its ancient importance; it is in a filthy and unwholesome state, refuse is thrown out in the streets, and the sewers are exposed. I was forced to leave the hotel on account of the bad smells from all quarters. The town has a Caimakam (Vice-Governor) and is the see of a Greek Metropolitan, who still retains his title, derived from the ancient metropolis of Cyzicus, considered to be one of the most important ones in the Orthodox Church.

Opposite the site of Cyzicus, on the main-land, stretches a ridge of mountains, the Adrasteia, rising 1,150 feet above sea level, and immediately to the west, in a saddle of the same ridge, lies Aidinjik, whence one gets a splendid view of the whole peninsula. It was from here that Sultan Bayazid the Second, in making his victorious descent from Broussa, when he reduced Karaman and the whole of Asia Minor to an Ottoman Province in 1486, obtained his first view of the Sea of Marmora and the ruined Cyzicus, and is said by the inhabitants of Hamamli to have wept at the sight of the once magnificent city, which at that time resembled a Cyclopean cemetery of granite and marble monuments.

The ancient Panormos, the modern Panderma, lies to the south east of Cyzicus on the main-land. Its population consists of Turks, Greeks, Armenians, and a few Jews. It also has a Caimakam.

The populations of all the non-Greek villages and towns speak both Turkish and Greek. The official language, however, is Turkish. All the local authorities profess in true Oriental fashion great affability, friendship, and willingness to help in the work of exploration, and are no doubt perfectly sincere in their own peculiar way. Labour is plentiful and cheap, and can be had from any of the surrounding villages at from one shilling to one shilling and fourpence per day.

The local Turkish name for the ruins of Cyzicus is Bal-Kis. As to the

origin of this name, various conjectures have been offered; some have connected it with the Arabic name for the Queen of Sheba, who, according to Texier, in other parts also of Asia Minor is similarly associated by local tradition with ancient remains. Another explanation (quoted by Leake) is that Bal in Turkish stands for 'honey' and Kiz for 'girl.' A certain king, so the story runs, had a beautiful daughter, as sweet as honey, who at her death was buried among the ruins of Cyzicus. Perhaps the most plausible explanation of the name is that of Leake (*Journal of a Tour in Asia Minor*, p. 271), who considers it to be a Turkish corruption of the two Greek words *παλαιὰ Κύζικος*: Leake quotes other examples of this process; probably the most familiar (which however Leake does not give) is the formation of the word Stamboul.

According to Strabo the island was 500 stadia in circumference, and the city was built on the southern slope of the spur of the Bear Hill (*ἄρκτων ὄρος*) which formed the Acropolis; at a date which is not quite certain, but which was comparatively late in its history, the town was enclosed within granite walls of solid masonry which can still be traced (as shown on the Plan) in nearly their entire circuit; these are more particularly clear on the southern side, which was contiguous to the ancient inner harbour, now an immense marsh overgrown with reeds.

Pliny says that by nature Cyzicus was a peninsula, but to secure themselves against enemies, the inhabitants cut a canal through the isthmus. This I have no doubt is true as regards the time of Alexander, but not of the very earliest period of the city's history, when Cyzicus must have been an island separated from the main-land by a shallow passage which silted up by the action of natural elements, a process which must have been already well advanced before the Macedonian conquest, and is still going on at the present day. The bottom of the marshy swamp between the two shores of the isthmus is still about three feet below sea level.

The climate is mild, the sea breeze moderating the temperature along the coast. The hottest summer days are never unbearable, neither is the winter cold. The site to-day is one big garden, rich in vegetation, which includes mulberry trees, olives, vines, Valonea oak, walnut, arbutus, laurustinus, myrtle, bay, ilex, honeysuckle, arum, ranunculus, cherry, plane, and hundreds of other species; the ruins and mounds of *débris* are overgrown with brush-wood, but, owing to the scarcity of fresh water, there are no habitable houses within the boundaries of the ancient walls; the nearest are a small cluster of sheds and huts for the culture of silkworms, recently built on a hillside in a south-westerly direction from the amphitheatre. Agriculture is profitable, but land is scarce. The patches of land that have been cleared among the ruins are used for vineyards, and for the cultivation of mulberry, olive, and other fruit trees. The soil, which is very fertile, is derived from the decomposition of the granite rocks surrounding the city. The disintegration of the granite produces alumina, and owing to the large proportion of felspar, the soil is enriched.

There is also a great variety of wild flowers, particularly the *Styrax*

officinalis and the modern Iris (*Cyzicena amaraeus*), of which an unguent was made, called Oleum Irinum, famed for its perfume and power of healing (Pliny, *H.N.* xiii. 1). Round about Cyzicus, Artace, and for a considerable distance along the north-west coast, more than twenty-one different kinds of grapes were known, some of which are under cultivation at the present day, the wine being exported to Constantinople and elsewhere.

The fauna comprises a great variety of small birds, while storks are numerous and live on reptiles. There are many snakes on the peninsula, some measuring from six to eight feet having been seen by the local guardians of the vineyards (Bekdjis). Hedgehogs and tortoises are very common, and rabbits and weasels are found occasionally. The bear has been seen on the peninsula; wolves are known to exist, and jackals are numerous.

The peninsula is also rich in minerals; good marketable granite and marble of a great variety of colours, asbestos, antimony, etc., are plentiful, and are easy to work and ship, but there is absolutely no enterprise. It was from Cyzicus that the marble was shipped to Halicarnassus for the Mausoleum. According to Böckh it was probably also from here that the material for the stele of Phanodiceus was obtained; Ptolemy of Egypt is supposed to have got the building materials for the Temple of Heraclea from the same place, while Constantine the Great built two arches at Constantinople of stone from Cyzicus (Marquardt, *Cyzicus*, p. 34).

While speaking of the natural wealth of the country, we may also mention that of the sea, which was famed in olden times, and is still to-day, for the quantity and variety of its fish, including porpoises, tunny-fish, sardines, etc., and turtles, lobsters, and oysters. On the last named Pliny (*H.N.* xxxii. 62) bestows an enthusiastic panegyric, which reads strangely like a modern advertisement, and ends with the statement that 'for sweetness and tenderness they cannot be surpassed by any oysters.'

Of the earliest period of Cyzicene history, very few remains are now traceable above ground. The Cyclopean walls of Artace, where the Argonauts landed on their way to Colchis, are still standing 20 feet wide and in a fair state of preservation on a small peninsula, the modern St. Simoon; and in the immediate vicinity, to the north of Artace, is an ancient well, which bears the local name of the 'Well of the Argonauts.' No other well of note or antiquity is known to exist in the neighbourhood. Another site associated in legend with the Argonauts is Mount Dindymene, on the summit of which, 2430 feet above sea level, they are said to have built a temple to the mother of the gods: ruins may still be traced here, but await investigation.

It is somewhat remarkable, as Perrot has pointed out (*Rev. Arch.* xxx. p. 106), that of all the many inscriptions which have as yet come from Cyzicus, only a very few can be assigned to a period before the Roman epoch, and none before the third century B.C. This is probably due to the fact that the city was in continuous occupation down to the year 1063, when it was destroyed by an earthquake. The destruction must have been sudden and complete, for the earthquake not only overwhelmed the city, its approaches,

and nearly all of its inhabitants, but it also cut off the supply of fresh water, thereby making the place impossible for habitation. Under the combined effects of natural elements, time, and the vandalism that followed, the accumulation of one layer upon another of silt and *débris*, and the growth of thick and luxurious brushwood, the city became hidden, and its site was almost lost and forgotten by the world at large. Such is its condition at the present day.

In the panoramic view, Fig. 1, Cyzicus, like the surrounding country, appears to be an extensive garden covering the slopes and spurs of a number of hillsides, but a closer examination, made in walking over the ground itself, discloses the positions of former buildings, the remains of which are distinctly discernible. Some of them rise to a height of from 20 to 40 feet above the average level of the site. In all of them more or less brick, marble, and granite masonry will be found clustered together.

Long stretches of the walls can likewise be seen, and although the upper structure has been removed, the remains can be traced in the direction indicated in Pl. XI. until the next portion of the wall is met with, and in such a manner an almost complete chain may be followed round the city. It is only at two places on the western side of the city that all traces of a connection become indistinct—namely, below the amphitheatre after crossing the River Kleite towards the Temple of Hadrian, and again for a short distance between the easternmost tower at the port of Chytus and the extreme end of the southern wall. These places are marked on the Plan 'Probable city wall.' This part of the wall was perhaps destroyed in the time of the Romans, when peace and tranquillity prevailed in the country, and the city spread westward where the Temple of Hadrian and other public buildings were erected. There are indications of several large buildings and a Roman cemetery in this neighbourhood. A splendid sarcophagus of the Roman period was unearthed some three years ago, and probably others may be found. No excavations whatever have been made here. The sarcophagus referred to remains in the ground with only the lid and the upper edges visible. Its contents were removed by the peasants who found it. The body, which I have recently had cleared, is without moulding or ornamentation of any kind; but the lid, which is roof-shaped, has at each end a pediment surmounted by acroteria; the central one over the apex is carved with a palmette; the two side ones, which are of exaggerated size, have the surface covered with a fine acanthus ornament. The tympanon of each pediment is deeply recessed, bordered on each side with a row of dentils, and filled with an elaborate acanthus design, also very finely treated.

In the portion of the northern wall, diagonally facing the entrance to the amphitheatre, are the remains of the only city gate still intact. It is about 20 feet high by 10 wide.

On the foundations of the extreme north-western angle of the apex of the wall stands a square, tower-shaped block of masonry, 20 feet high. The position is a commanding one, and served as a good landmark in mapping out the plan of the place.

Within the walls in this angle I found a cubic block of marble measuring 3 feet across all sides. It had apparently rolled down from the wall, and bears an inscription given in the succeeding article (p. 193, No. 2). The peasants had already commenced to chip off its sides, and from the circle drawn on one of the surfaces it seems to be intended in the future for a mortar. Quite close by, outside the eastern wall, a marble slab 4 feet long and 2 feet wide, with inscription on both sides, was found four years ago. The spot where it was found is in the bend of the wall, as will be seen on Pl. XI., where it takes an obtuse angle inwards; here the ground is honeycombed with ancient tombs. This inscription, which I saw in the village of Yeni-Keui, had been already prepared for publication by Mr. Cecil Smith with the rest of my series given below, when we learnt that it is to be issued by Dr. Wiegand in the forthcoming number of the *Athenische Mittheilungen*.

The southern wall was built of granite blocks, and had a number of towers. It can be traced across the whole isthmus, and from its solid structure appears to have been one of the main defences of the city. In many places it is more than 15 feet wide and often 30 feet high. I have endeavoured to trace the whole of its direction from sea to sea, and have reproduced the result on the Plan. It will be seen that it surrounds the inner harbour (Panormos) with two granite breakwaters. The eastern one I examined to its extreme end in the marsh. The other is no doubt built of similar material, and can be distinctly traced from the Acropolis with the naked eye. This harbour was probably the most spacious and important of all the harbours at Cyzicus.

Inside this southern wall are the ruins of some very large and important buildings of the city. A marshy ditch runs parallel with the wall, and quite close to it (see the dotted line on the Plan). According to Hamilton and Dr. Macris this should be the former canal, but there are grave reasons to doubt the accuracy of this theory. It is more likely a moat partly filled in.

An eastern harbour, now land-locked and overgrown with reeds, and one not mentioned by any of the classical or other authorities on Cyzicus, but probably constructed soon after the siege of the city by Mithridates, is traceable outside the city walls. It is duly protected by an extension of the southern wall towards the sea, and a hill, with traces of masonry on it, on the east side. It seems to have been constructed on what is, geologically speaking, a comparatively recent land formation.

In the middle of the eastern half of the southern wall is a big square tower, called in Turkish 'Demir Kapou' by the natives, meaning Iron Gate. It was probably at this spot that a bridge spanned the sandhill just outside the wall. The hill in question must have been created by the action of wind and water throwing the sand up on the beach, the mound being artificially increased when the cutting was made for the construction of the moat and city walls. It stretches a considerable distance across the isthmus, and was most likely met by a mole pushed out from the main-land towards the natural sea passage, the junction of the two being effected by another bridge. (See dotted lines on Plan.)

At the extreme eastern end of this portion of the wall will be found the foundations of a large structure in brick and granite, which can be traced for a considerable distance into the sea. When the sea is calm several rows of regularly cut granite blocks can be seen, the uppermost about 3 feet below the surface.

Having carefully taken the directions by compass of these foundations, I can only conclude that it was intended for a breakwater to protect the entrance of the channel leading into the eastern harbour. The extension of the southern wall ends suddenly a short distance from the water's edge, and although the beach is now completely covered with sand, it is not improbable that an entrance from the south existed here between the breakwater and the extreme end of the wall in question. I therefore venture to suggest the existence and position of such an entrance, indicated by dotted lines on the Plan.

The southern and south-western slopes of the hillsides of the peninsula, beginning at the city and extending a couple of miles to the north-east of Ermeni-Keui, are now one mass of decomposed granite, which becomes detached under the influence of changes in temperature, and is then carried down and deposited in the sea by the torrents and mountain streams, the frequent earthquakes, no doubt, aiding the process. The sand is then driven along the coast by the action of the wind and waves and the current from the Bosphorus, united with that of the Rhyndacus and other rivers, until it reaches the low-lying isthmus, where it is piled up in small sand ridges along the beach. The wind blows with the steadiness of trade winds from the east-north-east the whole year round, and as the above-mentioned process must have continued for innumerable ages, it may easily be conceived that the low-lying swampy isthmus of to-day is of comparatively recent creation. Not very long before the beginning of our era, what is now a lagoon and a marshy isthmus was a clear sheet of water dividing the island from the mainland.

In studying this question on the spot, one arrives at the conclusion that when the natural channel began silting up and choking the eastern passage, the Cyzicenes, unable to cope with the accumulating sand, were forced to devise means whereby a channel could be kept clear for their shipping. It was then that the eastern harbour with its breakwater and canal must have been constructed. The natural passage on the western side is partly open, even at the present day, where the low-lying beach, owing to the absence of westerly winds, is perfectly clear of sand ridges.

On a further examination of the harbour in question, I noticed that a cutting had been made in the city wall about half way down the western side of the harbour. Immediately inside the wall the configuration of the ground resembles a wide ditch, without a break all the way westward until it reaches the eastern wall of the inner harbour called Panormos. At this particular spot, one is somewhat baffled by the wall and a heap of *débris* across the probable canal; on the other hand, this heap may have been created by an accumulation of bricks, masonry, and other stones from the clearances made

for the vineyards on both sides of the wall. This solution will perhaps be found a correct one. A few days' work ought to decide the matter.

Once the existence of the canal as leading into the inner harbour is



FIG. 2.

established, its further direction can be followed through the marsh, distinctly through the aqueduct, and finally westwards into the sea through the passage across the beach. (The course is marked on the Plan in dotted lines.) In



FIG. 3.

this way the existence of a complete and protected channel, connecting both bays, is established.

The aqueduct, to which a reference has been made, is of Roman

construction, and supplied the city with water from the main-land. It was built on a chain of low granite arches, now 7 feet above water, with a 15 feet base. From the effects of repeated earthquakes, natural decay, and other causes, nothing but a disconnected line of masonry now remains. The ruins answer the purpose of a short and tolerably dry crossing for pedestrians to and from the peninsula. Fig. 2 gives a characteristic piece of the aqueduct, showing one of the arches.

On the peninsula there can also be seen traces of a system of water conduits, which supplied the city with water from the interior, both from the east and west, by means of red earthen pipes, 5 feet long and $2\frac{1}{2}$ feet in diameter. The western conduit was the more important one. Traces of a



FIG. 4.

dam to divert a stream from its course into a tunnel cut through the hill can still be seen some distance inland. This tunnel was connected with the pipes by a set of conduits hewn out of the rocks. Earthquakes and time have destroyed these also, but some of the pipes are in a perfect state of preservation, and are used in various ways by the natives. I saved two from destruction by bringing them down to Yeni-Keui. Their weight is about seven hundredweight each.

The 'Balik Tash' monument, on which Mr. Hasluck has contributed a paper in this number of the *Journal* (pp. 126 f.), was excavated by me in the north-western corner of the central harbour of Panormos, near the wall and the entrance to the city. At the bottom of the space excavated were found two blocks of granite and a large number of bones. The presence of the

bones, which are presumably sacrificial, would seem to indicate that the altar is nearly in its original position; a fact which seems to be confirmed by the existence of the granite foundation blocks. During the excavation, a stream of water rushed in when we reached a depth of three feet below the surface, necessitating constant baling. The monument is now covered up again with soil, this being the safest method of securing it against destruction.

Along the western beach of the isthmus no traces whatever can be seen of any constructions. There are no signs either of the moles or bridges, and the ground is only sufficiently raised to separate the marsh from the sea. There is, however, a break in this through which the water oozes out from the marsh into the sea, and this is possibly the former westward passage already mentioned. The westward mole must likewise have been built along



FIG. 5.

this elevation of ground. The western harbour, called Chytus, is also a big swamp overgrown with reeds. There are traces of a granite breakwater, partly submerged, as will be seen on the Plan.

Along the other side of the harbour stretch the extreme western defences of the city. There are two granite towers of the Greek Period, nearly twenty feet high, called in Turkish 'Bal-kiz Capou' (the Gate of Cyzicus). They are 90 yards apart, and are here connected by a granite wall, of which the lower course of masonry still remains intact. Turner speaks of two octagon towers protecting the entrance of the city; these are, however, six-sided.

Fig. 3 shows a view of the westernmost tower, as seen from the city, and Fig. 4 a characteristic part of the wall; adjoining the point here shown are the ruins of the substructure of Hadrian's temple which has formed the

subject of a paper by Mr. Théodore Reinach in the *Bulletin de Corr. Hellén.*, 1890, pp. 517-545. It is situated in a direction north-east of the two towers, and is the largest ruin at Cyzicus, covering several acres of ground; it is thickly overgrown with brushwood, and rises out of the surrounding vineyards like a flat hill. A rude shelter, built of a few poles and branches, for the guardian of the vineyards (Bekdji), stands on the summit, and affords a commanding view of the neighbourhood. (Fig. 5.)

The whole is thickly overgrown with brushwood, among which a regular network of arches can be traced. These must have been the supports of the flooring. There are also a number of well-preserved vaults inhabited by thousands of bats. The roof of one of them, some 50 feet long, was literally lined with these small animals. Judging from the pieces of fluted



FIG. 6.

marble columns lying about, the columns must have been at least 6 feet in diameter, and if, as Aristides says, they were made of a single piece, each must have weighed hundreds of tons.

Cyzicus was certainly favoured by nature, for besides her many other advantages she had very fine marble quarries close at hand; one at Proconnesus; and another with every facility for shipping near Artace, at the modern St. Simeon, four miles westward on the coast, where pink, white greyish-blue and green marble can be had in unlimited quantities. The wonderful and glowing descriptions of the Temple as given by Aristides, Dio Cassius, and Xiphilius, have been discredited by Hamilton, but with these facts before us, one is tempted to believe the Temple to have been one of the most magnificent buildings in the world.

On the north side of the Temple is a clear open space, perhaps the site of the Agora, supposed to have been 400 yards long by 100 yards wide, and surrounded by a portico.

The amphitheatre is situated in the valley on both sides of the sloping hills, outside the north-east walls of the city. Its elliptical shape may be traced from six or seven of the pilasters and arches still remaining here and there. The small mountain stream Kleite runs through the middle of the arena, along its longer axis, which measures about 150 yards. Higher up the valley there are signs of a dam to divert the course of the stream into a canal cut through the rocks when the arena was not required for a naumachia. (See Plan.) On a closer examination of the massive ruins a great number of the butt ends of marble columns, blocks, and slabs will be found built into



FIG. 7.

the buttresses and archways, and some with inscriptions are discernible in the facings of the southernmost ones. From this it may be inferred that the amphitheatre was constructed with the remnants of former Greek buildings destroyed by the earthquake during the reign of Hadrian.

The two views (Figs. 6 and 7) will serve to illustrate what remains of the amphitheatre to-day.

Fig. 6 is a photograph taken a short distance below the city gate, looking up the valley through the ruins; and Fig. 7 represents two of the pilasters with inscriptions from the northern hillside.

Tombs of the Graeco-Roman period have also been found on the slope of the hillside near the city gate, outside the wall.

A large semicircular building will be seen at the foot of the Acropolis

within the walls. It has the appearance of a Greek construction, facing due south. It measures about 100 yards in diameter and 40 feet high. Like all the other ruins, it is overgrown with heavy brushwood, which made exploration difficult. Inside the building several large marble blocks were found in making the ascent, and seats were discovered high up in the north-western part of the ruin. The site is marked on the Plan.

Near the inner harbour is another ruin built principally of brick, and some of the arches are in a fairly good state of preservation. Judging from its central position, we may suggest that this was possibly the Prytaneum.

The large mass of ruins west of the building last described has the appearance of a temple of Greek construction. It is about 100 yards in length and about 60 wide. The materials used in its construction were marble and granite; very few bricks are to be found. The whole, however, is covered with a thick growth of brushwood. Near it, on the north side, upside down, and three parts buried in the ground, was found the marble

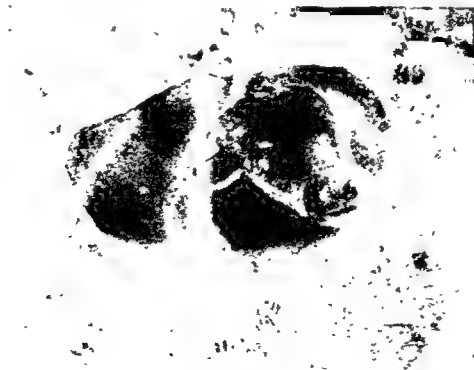


FIG. 8.

slab, bearing the important Philetairos inscription which is given below (p. 193, No. 3). A steep vaulted passage about 50 feet long was found under one of the heaps of ruins near the theatre; this was built of granite.

The other mounds and masses of ruins present externally no particular feature of interest, and no attempt to excavate any of them has yet been made. Whatever they contain is therefore hidden from view by the thick brushwood. Those examined and marked in the Plan belong apparently to the Graeco-Roman period; the ruins that can be seen are mostly of marble and granite.

There are a great number of richly sculptured fragments of marble and parts of figures and columns scattered throughout the site, many of them showing excellent workmanship; these are almost invariably discovered by the natives near some heap of ruins whilst enlarging the area under cultivation. In one of the heaps near the theatre, I found a chiselled marble cornice with coloured foliage, and a column with an inscription split in half

lengthwise (p. 201, No. 4); and the life-sized head of a bull in relief (Fig. 8) in a heap of ruins near the inner harbour; this appears to have formed part of some architectural member, and may be compared with the bulls' heads on the 'temple des Cornes' at Delos (*Bull. Corr. Hellén.* viii. p. 17), and the bull's head capital from Salamis in the British Museum, *Cat. Sculp.* No. 1510, Pl. 27.

ROBERT DE RUSTAFJELL.

INSCRIPTIONS FROM CYZICUS.

1. ON a slab of marble, ht. $10\frac{1}{2}$ in. \times 10 in., found within the walls during the tentative excavation. It is broken on the lower edge, but the other edges are fairly complete. The greater part is occupied with a relief representing Hermes and a goddess who is presumably Andeiris (Fig. 1). Both



FIG. 1.

figures face the spectator: on the left Hermes (apparently beardless), wearing short girt chiton, chlamys, and petasos, stands at rest with caduceus along left arm, and right hand resting on hip: on right is Andeiris, a draped woman. Unfortunately this figure is broken away diagonally from the left shoulder to the right breast, and the surface is injured throughout. It is consequently impossible accurately to distinguish the details.

The face and attitude generally seem to suggest an attempt to render a stiff and formal, if not an archaic effect, such as would be suitable for the representation of a xoanon. The hair is arranged in a mass around the forehead, suggesting the spiral curls of archaic art, and falls in two single tresses on each shoulder: from the top of the head rises a modius-shaped

object which, as will presently be shown, is probably a walled crown. On the right is part of some object, perhaps a fruit or the top of a distaff held in the left hand.

This figure is represented on a scale considerably larger than that of Hermes: and as her breast is but little above the level of the knees of her companion, it is natural to infer (on the assumption that the ground level was the same for both figures) that Andeiris was represented as a half or three-quarter figure rising from the ground. Immediately above the group is the inscription, and over it again a slight raised moulding.

. . . ΛΟΝΘΕΩΙΑΝΔΕΙΡΕΙΔΙ
ΠΕΡΓΑΜΟΥ
... λον θεῶν Ἀνδειρίδι
Περγάμου.

The form of the inscription makes it tolerably certain that this is a dedication, in which case we should expect the name of the dedicator in the first word. Of this word only the three final letters -λον are certain; preceding them must have been either three or four letters, which are now illegible. Names ending in -λον are extremely infrequent: in fact the only one which readily suggests itself is Εὐκόλον which occurs as the name of a woman on Attic stelae (*C.I.A.* ii. 988, 3707, 3708). This name would suit very well the spacing and appearance of the illegible letters, and we may therefore provisionally restore the name as Εὐκόλον.

The divinity here mentioned is apparently identical with the Ἀνδειρηνή represented on an inscribed relief in the Louvre¹ (*C.I.G.* iv. 6836). This relief, of which the provenance is unknown, was formerly in the Choiseul collection, and may therefore have been acquired in the Troad.² In Dubois' *Catalogue* No. 143 it is thus described: 'white marble relief, representing a bust of Cybele in full face. The goddess holds in her hands two objects somewhat difficult to identify, which roughly resemble a shuttle and a ball. Above the field . . . is engraved ΑΝΔΙΡΗΝΗ, and under the bust

ΓΛΥΚΙΝΝΑΜΗΝΟΦΩΝΤΟΣΘΕΩΙ | ΑΓΝΗΕΥΧΗΝ.

Ht. 33 cent. Width 23 cent.'

The dimensions, it will be noticed, are almost exactly the same as those of the Cyzicus marble: and the 'bust of Cybele' in both cases appears to be the same.

By kind permission of M. Michon we are enabled to give here (Fig. 2) a reproduction of the Louvre example. It will be seen that the style of this work is much coarser and apparently later, but that the type of the goddess is so similar to that of Fig. 1 that both would appear to have been copied from a common original. The object in the left hand appears to be a pomegranate.

¹ Salle de Milet. No. 2871; *Catalogue Sommaire de Sculpture*, No. 2871; Clarac, *Musée de Sculpture*, ed. Renach, p. 44, No. 3.

² Possibly at Cyzicus itself: cf. *C.I.G.* 3668, a marble from the same collection, which seems certainly assignable to this provenance.

that in the right a bird: both these objects as well as the walled crown, were probably reproduced also in the Eukolon relief, and are characteristic of the great nature goddess of Asia Minor, who unites in her artistic type the attributes of more than one of the female divinities of Greece. Assuming that Eukolon is a correct restoration, the dedicator in each case—as is not unnatural—is a woman.



FIG. 2.

Andeiris or Andeirene is the *μήτηρ θεῶν Ἀνδειρηγῆς* of Strabo 614 (cf. Steph. Byz. s.v. *Ἀνδείρα*). Andeira was a town in the Troad, the exact site of which does not appear to be yet identified: it possessed a mine of ironstone, a cavern extending a long distance underground, and a shrine of Andeirene. That this local cult should have found votaries at Cyzicus is only natural

when we remember that this city from early times was the chief centre of the Cybele worship in Northern Asia Minor.¹ Among the many forms of her name, Πλακτιανή (*C.I.G.* 3657), so called from the neighbouring town of Plakia, affords the best parallel to that of our inscription; while in the syncretism of Andeiris with the Pergamene mother of the gods we have a parallel in *C.I.G.* 6835, a relief representing Cybele between two lions, inscribed Μητέρα θεῶν Περγαμηνὴν Νεικηφόρος [τὴν] ἰδὲαν προστ[ά]τι[ν]. The Andeiris shrine was probably one of those 'temples or altars of the Idaean Mother which,' Strabo says (i, 38), 'are to be seen near Cyzicus.'

The type of the goddess here shown is obviously allied to that of Persephone, in her return from Hades: probably the cavern of Andeira was associated with her cult as a Chthonian deity. If, as is probable, she was a vegetation goddess, the presence of Hermes here, as the wind god who draws the vegetation from the ground, is appropriate enough: in the *Hymn to Demeter*, l. 377, and in many works of art, it is Hermes who conducts the car of Persephone on her return to the upper world (Forster, *Raub u. Rückkehr der Pers.*, p. 259 ff.). In any case, the fact that Hermes is omitted from the Glykinna relief shows that his association with Andeiris is merely subjective.

The final word of our inscription presents some difficulty. It is scarcely conceivable that Περγάμου can represent the patronymic of Andeiris, and in any case we should expect the definite article: on the other hand, if the reference is to a cult imported from Pergamon, allied say to the Demeter Karpophoros established there (*Perg. Inschr.* 291) we should expect τῶν Περγαμηνῶν, or ἐκ Περγάμου: or, on the analogy of *C.I.G.* 6835 already quoted, it might be Περγαμηνῇ. But perhaps in an inscription of late date such as this we must not expect accuracy of phrasing.

2. On a cubic block of marble from the angle of the wall, found within the city walls. Measures 3 ft. on each side; letters from $\frac{3}{4}$ in. to 1 in. high, here given in $\frac{1}{4}$ scale.

ΚΡΗΘΕΩΣ
ΤΟΥΕΣΤΙΑΙΟΥ

From the form of the inscription and the shape of the block on which it is cut, this is probably a statue base. According to Perrot the walls are attributable to the first half of the fourth century B.C. (cf. *Rev. Arch.* xxx, p. 94): if therefore this block was built into the wall in antiquity, it must have belonged to a late restoration, made after the statue to which it refers had been removed or destroyed. Hestaios is a not uncommon name in Cyzicene inscriptions.

3. A marble stele found by de R. in the inner harbour, near the supposed site of a temple. When first seen it was in an inverted position, covered to

¹ Γῆ Καρποφόρος occurs at Cyzicus, *Bull. Corr. Hell.* vi. 454, No. 87.

the extent of about one-third of its height with soil: to this fortunate circumstance is due the preservation of the first twenty lines or so of the inscription, the remainder, which was exposed, having become almost entirely illegible. The stele is at present slightly under five feet in height on its l. side, which must be nearly complete: from the lower left angle it is broken away obliquely to a point nearly half way up the r. side. The width at the bottom must have been about 22 in., whence it tapered upwards to a width of 20 in. at the top, below which a square moulding projects slightly all round. The letters are carefully cut, those of the heading being $\frac{3}{4}$ in., while the rest average $\frac{1}{2}$ in. in height. It is noticeable that care is taken to end each line with a word; the spaces left at the r. edge of the lines are consequently very irregular in width. The facsimile here given is a reproduction in $\frac{1}{4}$ scale of the original.

- Τάδε ἔδωκεν Φιλέταιρος
 Ἀττάλου δωρεὰν τῷ δήμῳ.
 Ἐπὶ Γοργιππίδου τοῦ Ἀπολλωνίου
 ἰ]ππαρχέω, εἰς ἀγῶνας, ἀργυρίου
 5 τάλαντα Ἀλεξάνδρεια εἵκοσιν,
 καὶ εἰς φυλακὴν τῆς χώρας ἵππους
 πεντήκοντα.
 Ἐπὶ Βουφαντίδου, πολεμηθείσης
 τῆς χώρας, ἀτέλειαν τῆς λείας,
 10 καὶ τῶν λοιπῶν ὧν ἀπεσκεύασαν,
 καὶ βοῶν ὧν ἀγοράσαντες
 ἐκ τῆς αὐτοῦ ἐξηγάγοντο.
 Ἐπὶ Φοίνικος, φυλακὴν τῆς χώρας
 καὶ τὰ ἀναλώματα τὰ εἰς ταύτην γινόμενα.
 15 Ἐπὶ Ποσειδῶνος, εἰς ἔλαιον καὶ [σ]υναγωγ[γὴν ?
 τῶν νέων, ἀργυρίου τάλαντα Ἀλεξάνδρεια
 εἵκοσιν ἑξ.
 Ἐπὶ Διομέδοντος, ἐν τῷ πολέμῳ
 τῷ πρὸς τοὺς Γαλάτας γ[ινομένῳ ?
 20 πυρῶν μεδίμνους [καὶ
 κρι]θῶν μεδίμνους
 ὑπη]ρετικὸν δω[
 κ]ατασκευὴν

This inscription records a list of the free gifts conferred on the people of Cyziens during a series of years by Philetairos, son of Attalos. This personage can be no other than the founder of the Pergamene dynasty, for two

ΤΑΔΕΕΔΩΚΕΝΦΙΛΕΤΑΙΡΟΣ
ΑΤΤΑΛΟΥΔΩΡΕΑΝΤΩΙΔΗΜΩΙ

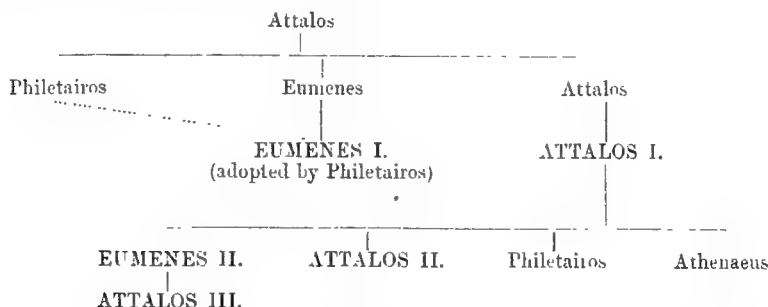
ΞΕΡΙΓΟΡΓΙΓΓΙΔΟΥΤΟΥΑΓΓΟΛΛΩΝΙΟ΄
ΓΓΑΡΧΕΩΕΙΣΑΓΩΝΑΣΑΡΓΥΡΙΟΥ
ΤΑΛΑΝΤΑΛΛΕΞΑΝΔΡΕΙΑΕΙΚΟΣΙΝ
ΚΑΙΕΙΣΦΥΛΑΚΗΝΤΗΣΧΩΡΑΣΙΠΠΟΥΣ
ΠΕΝΤΗΚΟΝΤΑ
ΕΡΙΒΟΥΦΑΝΤΙΔΟΥΠΟΛΕΜΗΘΕΙΣΗΣ
ΤΗΣΧΩΡΑΣΑΤΕΛΕΙΑΝΤΗΣΛΕΙΑΣ
ΚΑΙΤΩΝΛΟΙΓΩΝΩΝΑΓΕΣΚΕΥΑΣΑΝ
ΚΑΙΒΩΩΝΩΝΑΓΟΡΑΣΑΝΤΕΣ
ΕΚΤΗΣΑΥΤΟΥΕΞΗΓΑΓΟΝΤΟ
ΞΕΡΙΦΟΙΝΙΚΟΣΦΥΛΑΚΗΝΤΗΣΧΩΡΑΣ
ΚΑΙΤΑΑΝΑΛΩΜΑΤΑΤΑΕΙΣΤΑΥΤΗΝΓΙΝΟΜΕΝΑ
ΕΡΙΠΟΣΕΙΔΩΝΟΣΕΙΣΕΛΑΙΟΝΚΑΙΥΝΑΓΩΓΗ
ΤΩΝΝΕΩΝΑΡΓΥΡΙΟΥΤΑΛΑΝΤΑΛΛΕΞΑΝΔΡΕΙΑ
ΕΙΚΟΣΙΝΕΞ
ΕΡΙΔΙΟΜΕΔΟΝΤΟΣΕΝΤΩΙΠΟΛΕΜΩΙ
ΤΩΙΠΡΟΣΤΟΥΣΓΑΛΑΤΑΣΓ
ΓΥΡΩΝΜΕΔΙΜΝΟΥΣ
ΘΩΝΜΕΔΙΜΝΟΥΣ
ΙΡΕΤΙΚΟΝΔΩ
ΑΤΑΣΚΕΥΗΓ
ΙΟΙΙΣΟΣΤΗ
" "
Δ
ΣΚ

reasons: firstly, because the only other Philetairos known to history was the son of Attalos I., and would certainly have been entitled Φ. βασιλέως Ἀττάλου¹; and secondly, because the founder was the only Philetairos who was ever in a position to grant privileges concerning his country (τῆς αὐτοῦ), such as are involved in the entry under lines 8–12. Moreover the character of the writing is more suited to the first half of the third century B.C. than to any later date: there is still a tendency to write the Θ, Ο, and Ω in smaller size above the lower level of the line: both Μ and Σ have occasionally the long limbs sloping: and the Π has the second vertical limb short.

It is thus of considerable historical importance, for it not only adds something to the scanty knowledge we possess regarding the founder of the Pergamene dynasty, but it gives fresh landmarks for the history of Cyzicus, and contains what is probably the earliest mention yet known of the Galatian incursions into Asia Minor.

We learn here for the first time the name of the founder's father. The introduction into the Pergamene pedigree of yet another Attalos adds a new difficulty to the identification of some of its members.

In order to perceive this clearly it is necessary to recall once more the Pergamene stemma, as it now stands:—



Thus in *Perg. Inschr.* 10-12 a chariot race is celebrated, which had been won at Olympia by a certain Ἀττάλος, in consequence of which φήμα δ' εἰς Φιλέταιρον ἀοίδιμος ἦλθε καὶ οἴκους Περγάμου Ἀλείωι τ[ε]λ[ε]σαμένα στεφάνωι.² It is just conceivable that the Attalos referred to might be the father of Philetairos: but that would imply that the monument was erected after the dynasty was established at Pergamon, that is, comparatively late in the son's life: moreover there is no evidence to show that the father of Philetairos was a personage of sufficient importance to enter for the Olympian chariot race: so that Frankel is doubtless right in identifying the Attalos in question as the younger brother of Philetairos.

It is probable that the Pergamene dynasts were not particularly proud of their founder's origin; his mother according to Carystius (apud Athen.

¹ As for instance in Dittenberger¹, 295. 299.

² It is noticeable that the characters of this set of inscriptions, which must be before 263 B.C.,

are almost identical with those of our inscription.

xiii. p. 577b), was a Paphlagonian flute player and hetaira named Boa; and the chances are that Attalos of Tieion, *πολίχμιον οὐδὲν ἔχον μνήμης ἄξιον* as Strabo says (xii. p. 543), was a wholly insignificant person.

Similarly again in *Perg. Inscr.* 13, the Eumenes son of Attalos referred to in l. 46 as the leader of a military revolution against Eumenes I. the (adopted) son of Philetairos, is supposed by Fränkel to be a son (otherwise unknown) of Philetairos' second brother Attalos. We now see however that the revolutionary leader in question might conceivably be the father of Eumenes I. It is always possible that the elder Eumenes may have thought himself slighted when the succession passed to his son instead of to himself and have attempted to oust the heir: at any rate, so long as we do not know whether Attalos I. had a brother Eumenes, this alternative is at least worthy of consideration. Fränkel, *ibid.* p. 13 regards the inscription as affording a glimpse into the 'schwierigen und durftigen Anfänge des pergameni-schen Reichs.' But this conclusion is hardly borne out by the evidence of our inscription; if the predecessor of Eumenes I. was in a position to extend a helping hand so far afield as Cyzicus, it is natural to infer that his tenure of power at Pergamon was already fairly secure: and it seems more reasonable to suppose that the difficulties of Eumenes I. arose from some internal cause such as that just suggested.

From the time when Philetairos felt himself secure in the independent control of Pergamon and the treasure of Lysimachus, he seems to have embarked on a policy of ingratiation and conciliation with the important cities of Northern Asia Minor. An example of this is, as Fränkel has well pointed out, the Pergamene decree relating to the boundary-dispute between Pitane and Mytilene (*Perg. Inscr.* no. 245, frag. C, l. 44) *δόντος [εἰς τὰ] αὐτὰ Πιτανάοις καὶ Φιλεταίρου τ[ά]λαντα τεσσαρά [?]κοντα*: it is possible that the sum in question was only an item in a long category, similar to ours, of benefits conferred on the people of Pitane. In our inscription we see the beginning of that close relationship between Cyzicus and the Pergamene dynasty which was to culminate in the marriage of Attalos I. with the daughter of a Cyzicene citizen.

Philetairos was placed in occupation of the fortress of Pergamon in 283 B.C. and died in 263. Our inscription therefore must fall between these two dates, for it would scarcely have been set up after the benefactor's death, except at the instance of one of his successors; and in that case the fact would have been noted in the preamble. It is a pity that so much of the inscription is lost, and that the statements of fact are not sufficiently definite to enable us to determine the date still more precisely. If we knew a little more of the history of Cyzicus during the second quarter of the third century B.C., we should probably be able to date the events referred to absolutely. The part of the inscription which is preserved deals with five different years, arranged (as we are justified in presuming) in chronological order, though not necessarily in continuous succession. In the first and third entry, Philetairos provides a *φυλακὴν τῆς χώρας*: in the second, the country is engaged in a successful war, apparently at a distance, as it

entailed a return through Pergamene territory. In the fifth, Cyzicus finds itself involved in a struggle with the Galatians, and is evidently hard pressed for supplies, as the Pergamene present takes in this year the form of provisions of corn.

It is noticeable that on this occasion Philetairos does not send military aid to Cyzicus. Against the vast army of Galatians who under Leonnorius and Lutarios numbered some ten thousand armed men, it was probably impossible for the Cyzicenes, even supposing Philetairos had himself been in a condition to send assistance, to hope to make headway. Their natural course would be to retire to their peninsula and sever it from connection with the mainland. In thus doing they cut themselves off from their main sources of corn supply: but they also found an efficient safeguard against the Galatians, who, as we know, were both ill provided with, and unaccustomed to, marine transport: the Galatians could neither cross the water to Cyzicus nor prevent the corn-ships of Philetairos from reaching the town.

Let us now see how far these statements fit in with the known historical facts.

The struggle between Antiochos I. on the one hand, and Nikomedes I. and Antigonos Gonatas on the other, seems to have been fought out especially on the coasts of Asia Minor and the Hellespont.¹ In the peace which was declared in B.C. 279, Nikomedes was not included; for this reason, and being moreover threatened with an insurrection under Zipoites, he called in the help of the Galati, who, having reduced the Thracian coast, crossed over to Asia Minor in B.C. 278. They first discharged their contract with Nikomedes, and then proceeded in business-like fashion to divide up into three groups, each taking a special part of Asia Minor for purposes of plunder.² One detachment (probably the Trokni) overran the shores of the Hellespont, and reached as far as Ilion: this raid is presumably referred to in the inscription from Erythrae³ in honour of the strategi, πο[λλῶν δὲ φό]βον καὶ κινδύνων περιστάντων, and alluding to the collecting and despatch of the necessary money [τοῖς περὶ Λεον]νόριον βαρβάροις. How far Cyzicus suffered in the general pillage, we are not with any certainty informed: there is at any rate no direct mention of the town having been sacked: on the other hand, for the reason above given, it would seem from our inscription that Cyzicus itself escaped from falling into the Galatians' hands. Probably, as above suggested, the citizens would secure their retreat by destroying the dykes or bridges and letting through the sea, thus converting Cyzicus into a temporary island. In the third century A.D. a similar thing may very likely have occurred on the occasion of the Gothic invasion: possibly the 'flood of the Rhindacus' which, according to Zosimus i, 35, on that occasion saved the city is a misunderstanding of what was really due to the action of the Cyzicenes themselves.

In the quarrel between Nikomedes and Antiochos there can be little

¹ Niese, *Gesch. der gr. und mak. Staaten*, ii. pp. 76 foll.

² Stahelin, *Gesch. der kleinasi. Galater*, p. 11.

³ Dittenberger², 210; Michel, 503.

doubt as to which side would naturally enlist the sympathies of Cyzicus. It was part of Philetairos' policy to cultivate the friendship of Antiochos, whose near relative Antiochis was married to the younger brother of the Pergamene dynast: and it is unlikely that Philetairos would have assisted Cyzicus at this juncture if that city had been hostile to his ally.

On the whole, I think we are justified in claiming a strong probability for the date 285-275 B.C. as covering the years mentioned in the text before us; we may even suggest that the military events recorded in the first three years were connected with the closing episodes of the struggle between Nikomedes and Antiochos: and that the year of Poseidon (l. 15) marks the year 279/278 B.C., when, peace having been apparently secured, the Cyzicenes were once more at liberty to turn their attention to domestic affairs. It must however be noted that in the first entry provision is made both for a *φυλακή τῆς χώρας* and for celebrating the games. As these games are not more distinctly specified, they were presumably the national games, which at a later period at any rate were Olympia,¹ and as Aristides says,² were celebrated every fourth year at the end of June, determining the reckoning of Olympiads for Cyzicus. We know further from the same source that the Olympia were celebrated at Cyzicus in A.D. 171. If we could assume that the series had continued unbroken for so many centuries, that would bring the celebration mentioned in our first entry to the year 281 B.C. The next celebration should have taken place in the year of the Galatian invasion, supposing, that is, that the years of our inscription form a continuous series.

The eponymous magistrate, as usual at Cyzicus, is the hipparch: the title is mentioned in the first entry and left to be understood after the remaining names. The name of Phoinix (l. 13) recurs in a Cyzicene inscription published by Mordtmann in *Ath. Mitt.* x. p. 201;³ it is a stele with a relief, dedicated to Heracles by certain strategi and phylarchs. Michel assigns it to the second century B.C. without stating any reasons; Mr. Hasluck, however, who has kindly examined the original, is of opinion that the inscription may be earlier: the sculpture is of inferior character and gives little clue to date, but in general character suggests a reminiscence of the Amazon frieze of the Mausoleum. The lettering is rather irregular, but all the forms are of a good period; the characteristic letters indeed exactly resemble those of our inscription. I think therefore that we are justified in identifying the Phoinix of both inscriptions as the same hipparch: it is even tempting to suggest that the dedication by the strategi and phylarchs may have been a thank offering to Heracles *Ἀλεξίκακος* having reference to the *φυλακὴν τῆς χώρας* of our l. 13.⁴

In l. 15 the eponymous hipparch is Poseidon. It is of course just possible that this may be the name of an ordinary individual: only two

¹ *C. I. G.* 2510. Κόζικον Ὀλύμπια.

² Masson, *Coll. ad. v. Arist.* p. 137.

³ Michel, No. 1224.

⁴ If there were two eponymous hipparchs of the same name within the century, it seems

probable that the second at least would be distinguished by his patronymic. Possibly the insertion of the patronymic of Gorgippades in l. 3 may be due to some such cause.

instances however of its occurrence are known to Pape-Benseler, viz. an inscription given in *C.I.G.* ii, *addenda*, 1957, g, where Julianus Poseidon may be Poseidon[ius or some similar name: and a vase-painter who certainly never existed, in Canino vas. 1614. It is more likely that Poseidon is here the god: in many Greek states, whenever it happened that for any reason no one could be found to undertake the burden of magistracy, it was not unusual to let this devolve upon the god: examples of this are found in inscriptions from Antandros, Iasos, Miletus, Priene, and Magnesia;¹ sometimes, as in the last quoted, (Kern. *Inschr. von Magn.* 90), the year is still further identified by the addition of the name of the preceding eponymus, Στε[φανηφοροῦντος τοῦ θεοῦ τοῦ μετὰ Φρήτορ[α: but in our inscription this is for obvious reasons unnecessary.

To the list of twenty-three hipparchs of Cyzicus given by Mordtmann in *Ath. Mitth.* x. pp. 202—3, we must now add:

24. ἐπὶ Ἑστιαίου τοῦ Θεμιστόνακτος, *Ath. Mitth.* xvi, 141 = *Bull. Corr. Hell.* xii, 188.

25. ἐπὶ Πανσανίου τοῦ Εὐμένους, *Bull. Corr. Hell.* vi, 613.

26. ἐπὶ Δημητρίου τοῦ Λυσικλέους, *Bull. Corr. Hell.* xii, 190.

27. Ἰππ. Κλ. Ἐπ[ε]ωνέως ἡρώος, *Bull. Corr. Hell.* xiv, p. 537; and from our inscription,

28. ἐπὶ Γοργιππίδου τοῦ Ἀπολλωνίου.

29. ἐπὶ Βουφαντίδου.

30. ἐπὶ Φοίνικος (also in *Ath. Mitth.* x, 201).

31. ἐπὶ Ποσειδῶνος.

32. ἐπὶ Διομέδοντος.

33. A further inscription, referred to below, (p. 207) has . . . χέω Κυανοῦς, which appears to be the name of yet another hipparch.

L. 5. τάλαντα Ἀλεξάνδρεια. One cannot help feeling that there is a certain grim humour in this description of the Lysimachian talents which Philetairos had appropriated. In the inscriptions of the third and second century B.C. the money reckoning is often stated in terms of the standard of Alexander: when used alone, the word Ἀλεξανδρεία implies the drachma: this appears to be the first instance yet noted of its employment in terms of talents.² It is uncertain whether the line as given above is complete: perhaps as the ν ἐφελκυστικόν is attached to εἴκοσιν, we may supply ἕξ (as in l. 17), for which there is room on the stone.

L. 6. The mention of ἵππους reminds one of the epitaph on Arkesilaos given in Diog. Laert. 4, 6, 30: Πέργαμος οὐχ ὅπλοις κλεινὴ μόνον ἀλλὰ καὶ ἵπποις.

L. 8. foll. The sense appears to be somewhat as follows: 'the country having been plunged in war, he allowed exemption of duty on plunder and on

¹ See Fabricius in *Sitzungsberichte der Berl. Akad.* 1894, p. 907. Dr. Wilhelm very kindly supplied these references. Probably the ἐπὶ Γαίου Καίσαρος ἵππαρχέω in *Berl. Ber.* 1874,

p. 1. No. IV., is a further Cyzicene instance of a similar process.

² See Pauly-Wissowa. i. pp. 1397—8, s.v. Ἀλεξάνδρειος.

the rest of what they carried off, and on the cattle which they purchased and exported out of his country.' For arrangements of this kind, see the treaties between Hermias and Erythrae, and between Hierapytna and Priamos (Michel 12 and 16). In l. 10 we might possibly restore ἀπεσκευάσ[α]ντο as in Michel p. 17, l. 57.

L. 15. The reading of the final word is unfortunately quite uncertain: συναγωγή and συνάγειν appear usually to apply to the calling together of a society or eranos:¹ but it seems unusual in the connection shown here, though it is difficult to suggest any other restoration.

Ll. 20-27 are almost hopelessly illegible on the impression, but it is very likely that an examination of the original will elicit a good deal more than is here read.

4. On a marble column split in half longitudinally, found to the eastward of the Theatre in June 1900: right edge of the inscription complete. Ht. about 2 ft. The letters vary in height from 1½ in. to 1½ in.

L. 1. Νέρο]να[ς † L. 2. Τρα]ια[νός †

5. On a long narrow marble slab near the ruins of a temple (?) at the inner harbour; the slab has been broken in two and one half laid on the other, the upper surface hollowed to form a trough. The total length of the complete slab was 4 ft., the height about 8 in.

Ὁ δῆμος

Λυσαγόραν Σείμου, φύσει Ἀπολλοδώρου,
ἄνδρα φιλόπατριν καὶ ἀγαθὸν ἐν παντὶ
καιρῷ γεγονότα πίσσης ἀρετῆς ἕνεκα.

6. Marble stele broken transversely in two but fairly complete; found 'near the port of Panormos within the walls': the upper part has a sunk panel nearly square, in which is a figure of a boy facing the spectator, holding in his r. hand some object, perhaps a bunch of grapes (?), over a dog which is seated on l. looking up at him. He appears to wear a mantle hanging at the back and across his body from his l. shoulder: the style is coarse and careless. Ht. 9 in., width 8 in. Below the panel is inscribed

Ἐπαφρόδειτε χαῖρε.

7. Marble tablet found by Mr. de Rustafjaell during a tentative excavation near the Theatre. On the surface of the marble a square panel is sunk, within which the inscription is engraved. The upper edge of the marble is chipped, but very little seems lost. Ht. 15½ in., width 14 in.: the panel is 10 in. high by 10½ in. wide.

¹ See e.g. Dittenberger, 633, l. 21, 734, l. 93, etc.

ΟΥΤΗΙ
 Σ
 ΛΥΣΑΓΟΡΑΝΣΕΙΜΟΥΤΟΥΦΥΣΕΙΑΠΟΜΟΔΩΡΟΥ
 ΑΝΔΡΑΦΙΛΟΓΙΑΤΡΙΝΚΑΙΑΓΑΘΟΝΕΝΤΑΝΤΙ
 ΚΑΙΡΩΓΕΓΟΝΟΤΑΤΤΑΣΗΣΑΡΕΤΗΣΕΝΕΚΑ

No. 5

ΨΑ
 ΙΑ
 ΣΑΝ
)ΛΙ
 'ΦΕ

No. 4.

ΕΠΑΦΡΟΔΕΙΤΕ
 ΧΑΙΡΕ

No. 6.

ΣΕΝΤΙΟΣΠΑΥΛΟΣ
 ΟΚΑΤΑΣΚΕΥΑΖΕΙ
 ΟΘΡΕΠΤΟΣΕΥ
 ΤΥΧΟΣΕΙΣΟΕ
 ΔΑΠΑΝΗΣΕΛΛΗΝΗ
 ΜΑ ΧΙ Ι



No. 7.

Σέντιος Παῦλος, | ὃ κατασκευάζει | ὁ θρεπτὸς Εὐ|τυχος, εἰς ὃ ἐ|δαπάνησε
μνη|μα (δηνάρια) ΠΙ !

8. A slab of marble built into the fountain at Yeni-keui: the letters were entirely filled in with cement, which had to be picked out in order to allow of the impression being taken. Ht. 16½ in., width 4 ft. 7½ in.

ΥΠΟΜΝΗΜΑ
ΠΛΩΤΙΑΣ ΕΠΙΓΟΝΗΣ ΟΚΑΤΕΣΚΕΥΑΣΕΝΑΥΤΗ
ΟΠΑΤΩΝΗΣ ΠΛΩΤΙΟΣ ΒΑΣΣΟΣ

Ἵπόμνημα
Πλωτίας Ἐπιγόνης, ὃ κατεσκεύασεν αὐτῇ
ὁ πατρώνης Πλώτιος Βάσσος.

A very similar epitaph, including the unusual form πατρώνης, occurs on a sarcophagus from Cyzicus in Chinli Kiosk, *Ath. Mitt.* x. p. 210.

9. A slab of marble found outside the eastern walls. Broken at the upper corners and on the lower edge. Ht. 22½ in., width 12½ in. Letters 2 in. high.



Εἰς ἴα [κὲ
ῥόδα τὰ
ὄστέα σ-
ου μακάρ-
5 ιε Ἀρκά-
δι' αἰείμ-
νηστε
κύρι' ἀλ-
ηθάργ-
10 [ητε ?

The suggested restoration of ll. 1-2 is due to Prof. E. Gardner. Some verb like βλαστήσειεν is presumably omitted. The idea is not uncommonly found in Greek and Latin epitaphs, see A. B. Cook in *J. H. S.*, xx. p. 13, who quotes instances. Ἀληθάργητος (if that is the correct restoration), seems to be used here in much the same sense as αἰέμνηστος, though in other instances (e.g., *C. I. G.* 2804 and Macarius 837) it is usually taken as meaning 'unforgetting' rather than 'unforgotten.'

10. On a marble stele at Cossack-Kewi, said to have been brought from Gonen (from copy by de R.)

ΥΠΟΜΝΗΜΑ

ΑΥΡ ΠΕΡΙΓΕΝΟΥΣ ΤΟΥ ΜΕΝΕΣΤΡΑΤΟΥ Ο ΚΑΤΕΣΚΕΥΑΣΕΝ ΕΑΥΤΩ ΖΩΝ
ΚΑΙ ΤΩ ΥΩ ΠΕΡΙΓΕΝΕΙ ΚΑΙ ΤΟΙΣ ΕΚΓΟΝΟΙΣ ΤΟΙΣ ΕΚ ΤΟΥ ΥΟΥ ΠΕΡΙΓΕΝΟΥΣ
ΚΑΙ ΤΩ ΘΡΕΠΤΩ

Ὑπόμνημα

Αὐρ. Περιγένους τοῦ Μενεστράτου, ὁ κατεσκεύασεν ἑαυτῷ ζῶν,
καὶ τῷ υἱῷ Περιγένει, καὶ τοῖς ἐκγόνοις τοῖς ἐκ τοῦ υἱοῦ Περιγένους,
καὶ τῷ θρεπτῷ.

11. Fragment of marble found near the apex of the north wall. Height of inscribed surface $5\frac{1}{2}$ in. by 4 in. wide.

ΝΙΟ
ΕΝΙ
ΤΡΟΤ

12. Lower part of a slab of marble, a portion of the right and lower edges complete: found near the apex of the north wall. Height $10\frac{1}{2}$ ins. by 10 ins. wide.

Β Φ Θ Ε Σ

Ll. 2-3 κατ[αθέσ[θαι . . . [δηνάρια] β,φ. Probably the usual formula imposing a fine on anyone who should disturb the grave: for a similar phrase cf. *C.I.G.* 3688, εἰ δέ τις πολμήσ[ει] ἕτερον κα[τα]θέσθαι δώσει τῷ ταμείῳ δηνάρια β,φ. The amount fixed is generally the same, see *C.I.G.* 3685 and *Ath. Myth.* x. p. 210, no. 38.

13. On a marble stele, found in the north-eastern angle of the city wall. Height. 3 ft. 1 in. by 1 ft. $7\frac{1}{2}$ ins. The upper part is broken away.

ΙΙ
 Ν ΤΑΝΙ Τ
 ΠΛΩΤΙΟΣ ΦΙΡΜΟΣ ΟΙΝΟΦΥ
 Μ ΒΙΓΕΛΛΙΟΣ ΣΕΡΔΩΝ
 ΠΑΙΛΙΟΣ ΒΟΛΟΥΣΤΙΟΣ ΔΙΟΓΕΝΗΣ
 ΤΙ ΚΛ ΚΑΡΤΙΟΦΟΡΟΣ Ι΄ΑΙΟΣ ΛΟΥΚΙΟΣ
 ΓΚΕΣΣΙΟΣ ΣΩΤΗΡ ΑΣΚΛΗΠΙΑΔΗΣ ΓΡΩΤ
 ΚΙΟΥΛΙΟΣ ΛΑΛΟΣ ΙΛΑΡΟΣ ΜΠΟΔΩΡΟΥ
 ΤΙ ΚΛ ΕΠΙΚΤΗΤΟΣ ΔΑΦΝΟΣ ΒΕΝΟΥΣ
 Ι ΠΛΩΤΙΟΣ ΕΡΜΕΪΑΣ ΕΠΑΦΡΟΔΙΤΕΑΝ
 ΤΙ ΚΛ ΦΛΑΒΙΑΝΟΣ ΜΕΝΕΛΑΟΣ ΓΛΑΥΚΟ
 ΣΕΣ ΦΟΥΛ ΠΛΩ ΜΕΝΑΝΔΡΟΣ ΜΑΡΚΟΣ
 Π ΚΑΣΣΙΟΣ ΜΥΡΙΝΟΣ ΑΡΕΜΩΝ Θ
 ΓΕΙΣΩΝ Θ ΕΥΤΥΧΟΣ Θ ΣΤΡΑΤΟΝΕΙΚΟ
 ΙΛΟΣ ΕΝΟΣ ΑΡΧΩΤΙΧΟΣ Θ ΠΡΥ
 ΑΣΚΛΗΠΙΑΔΗΣ ΔΙ ΑΚΙΝΔΥΝΟΣ ΦΟΙΒΟΣ
 ΑΚΙΝΔΥΝΟΣ ΑΣ ΕΣΤΙΑΙΟΣ ΓΕΛΟΠΟΣ
 ΝΙ ΤΕΡΤΕΡΝΑΣ ΠΟΠΙΛΛΙΟΣ ΣΥΝΠΟΙΗ
 ΚΑΡΠΟΣ Θ ΚΛΤΑ ΑΔΟΣΑΝ ΑΨ ΦΥΛΗ
 ΜΥΣΤΑΙ ΑΛΥΠΟΣ ΑΡΙΣΤΑΙΝΕΤΟΣ
 ΔΙΟΦΑΝΤΟΣ Θ ΦΙΛ ΑΣΚΛΗΠΙΟΔΟΤΟΣ ΛΕΥ
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 ΚΑΣΣΙΟΣ ΟΝΗΣΙΜΟΣ

- Μ . . . τανι . τ
 Η. Πλώτιος Φέρμος οἰνοφύ.
 Μ. Βιγέλλιος Σερδώνιος)
 5 Π. Αἴλιος Βολούστιος, Διογένης . . .
 Τι. Κλ. Καρποφόρος, Γάιος Λούκιος . . .
 Γ. Κέσσιος Σωτήρ Ἀσκληπιάδης Πρωτ.
 Κ. Ἰούλιος Αἴλος Ἴλαρος Μητροδώρου
 Τι. Κλ. Ἐπίκτητος Δάφνος Βενοῦσι(τον)
 10 Π. Πλώτιος Ἑρμησίας Ἐπαφρόδιτος Ἀντ.
 Τι. Κλ. Φλαβιανὸς Μενέλαος Γλαῦκος
 Σέξ. Φούλ. Πλώ. Μένανδρος Μάρκος
 Π. Κάσσιος Μυρίνος Ἀρτέμων β.
 Πείσων β. Εὐτυχὸς β. Στρατόνεικος
 15 Φ]ιλόξερος ἀρ. Ζώτιχος β. πρν.
 Ἀσκληπιάδης δι. Ἀκίνδυνος Φοῖβος
 Ἀκίνδυνος Ἀσ. Ἐστιαῖος Πέλοπος
 Μ. Περπέρνας Ποπίλλιος συνποιη(τῆς)
 Κάρπος β. κατὰ [τ]ὰ δόξαν[τ]α τῇ φυλῇ !)
 20 Μύσται. Ἄλνυπος Ἀρισταίνετος
 Διόφαντος β. φιλ. Ἀσκληπιόδοτος Λευ. .
 Ἀριστόμαχος Γάμου φιλ. Ἀλέξανδρος Δείου
 Ἀρτέμων β. νε. φιλ.
 Λ. Ἰούλ. Ἑρμᾶς φιλ. Γ. Πακώνιος Μάρκελλος
 25 Τι. Κλ. Ροῦφος Σοφιστῆς φιλ. Τ. Φλ. Μάξιμος
 Ἑρμογένης Ὀνησίμου φιλ. Βαλέριος Πρεῖσκο(ς)
 Ἀρχέστρατος Ἀντιπάτρο[υ] φι. Τ. Φλ. Τέρτυλλος
 Ἐπαφρόδειτος β. Θείβας φι.
 Π. Αἰλ. Κορνηλιανὸς Διονύσιος φι. μος
 30 Γάιος Σαλλουστίου Σέξ. Σερβεῖλιος Τρόφι-
 Γ. Βεῖβιος Τελεσφορίων
 Ἰουλιανὸς Στρατονείκου
 Λεύκιος Μηνοδότου
 Π. Ἰούλιος Δημήτριος
 35 Ὀνήσιμος Μυρίνου
 Κάσσιος Ὀνήσιμος.

One of the ordinary prytany-lists of which so large a number has already been found at Cyzicus: unfortunately the preamble, usually the most interesting feature, is here wanting. Judging from the general character of the names, it probably belongs to the time of Hadrian. The titles of officials which are given in an abbreviated form are not always easy to distinguish from the names of patronymics, which are also frequently abbreviated: of those already known we have here οἰνοφύ[λαξ] l. 3, ἀρ[χώνης] ? l. 15, πρν-[τανάρχης] l. 15, δι[άκονος] or δι[οικήτης] l. 16, φιλότειμος ll. 21-29; and two which are new, συνποιη[τῆς] l. 18, and νε. φιλ. in l. 23: in the prytany-list of

which Mr. de Rustafjaell sent home an impression, but which is shortly to appear edited by Dr. Wiegand in the *Ath. Mitt.*, the form *νεω*, occurs after a name: perhaps our entry should be read as *νεω[κόρος] φιλ[ότειμος]*. Possibly *Πρωτ.* in l. 7 may be the abbreviated form of a title, but it is not one previously known. *Συνποιητής* presumably implies merely an assistant. L. 19 *κατὰ τὰ δόξαντα τῇ φυλῇ* is an unusual formula to find in these lists; the reading is not certain, but it can hardly be anything different.

14. On a small cubical block of pink St. Simeon marble found near the theatre: damaged by fire, and both upper angles wanting. On the upper surface is an oblong sinking. Ht. $6\frac{3}{4}$ in. by $5\frac{1}{2}$ in. wide.

ΣΝΙ
ΙΕΙΚΑΝΔΛ
ΔΙΙΥΨΙΣΤΙ
ΕΥΧΙΗΝ

Σ]ωγ[ένης ?
Νεικάνδρου
Δὰ ὑψίστῳ
εὐχίην.

Votive dedications to Zeus "Υψιστος are not uncommon at Cyzicus; see *Bull. Corr. Hell.* xvii. p. 520, No. 1 = *Rev. Arch.* N.S. III. xvii. p. 11, No. 1.

Among Mr. de Rustafjaell's papers there are also two of fragmentary inscriptions which are in very bad condition and which it is hardly safe to publish from a single not very good impression. The first (No. 15) is part of a triangular stele found to westward of the Theatre, which appears to be a list of tribesmen, perhaps a prytany-list, as among the names comes in larger characters the word . . . ΕΙΣ which is evidently the end of the name of the tribe: the lettering of this is good and may even belong to the middle of the third century B.C., in which case it is the earliest list of the kind which has yet come from Cyzicus. The other (No. 16) is part of a stele found in the eastern harbour; on the narrow side seems to have been the preamble, as it has l. 7 *γρα]μματεύοντ[ος]*, l. 8 *βουλῇ*, and l. 13 part of the name of an eponymous hipparch *ἐπὶ ἱππαρχέω Κναρο[ύς]*! Of the large side only a word or two here and there, apparently names, can be deciphered. In this case also the lettering seems to be of a good period.

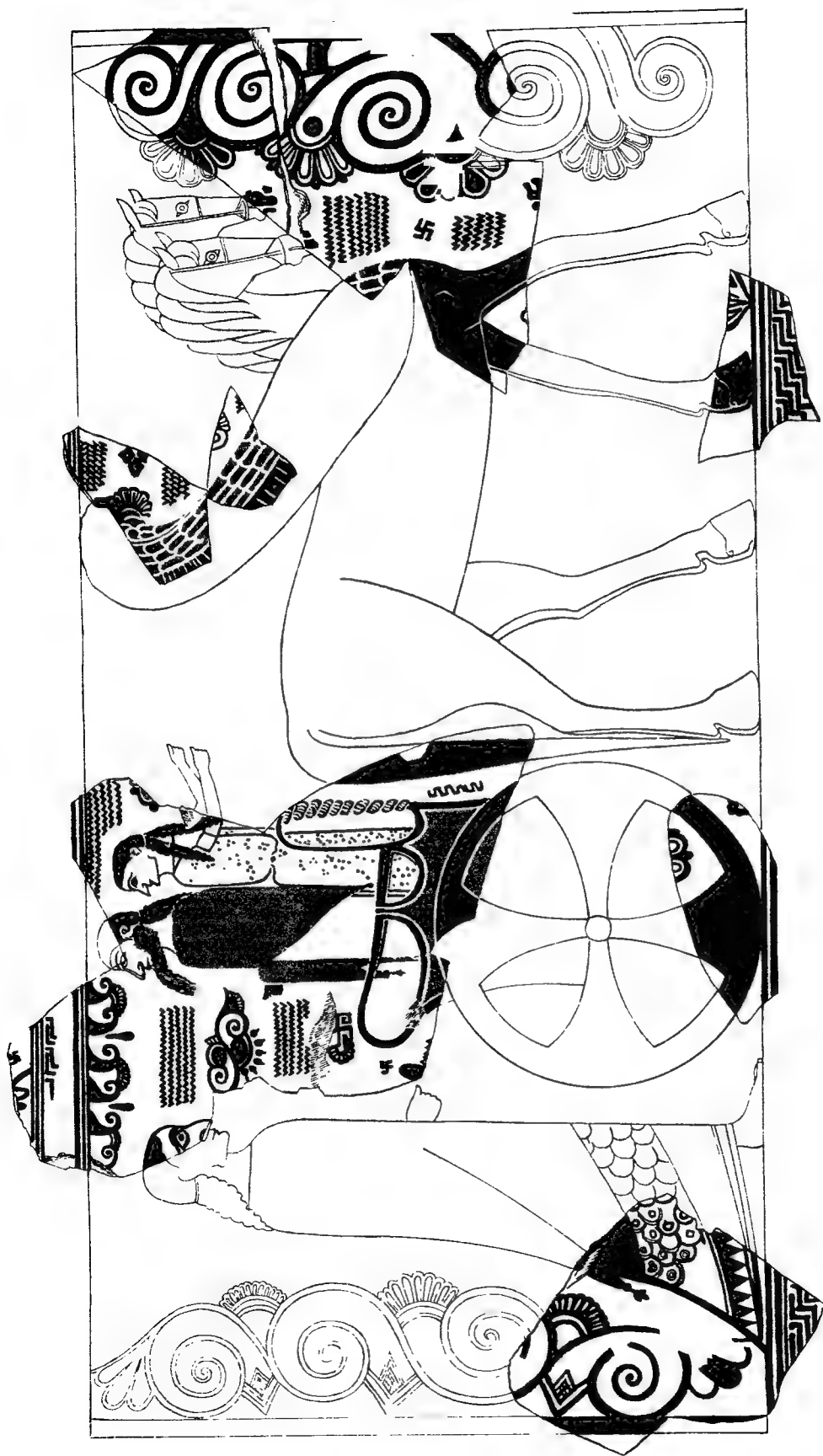
CECIL SMITH.
R. DE RUSTAFJAE LL.



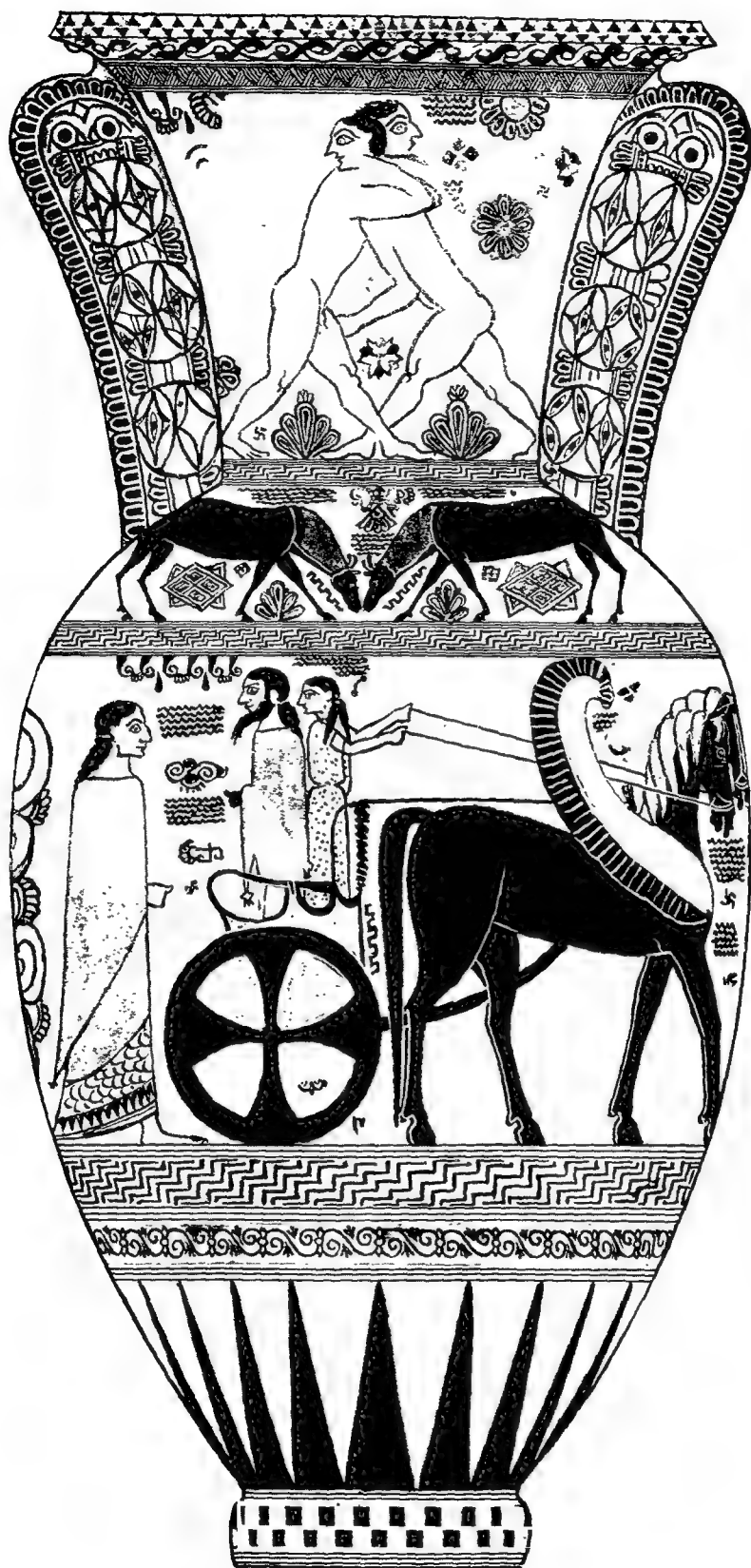
ATHENIAN STELE



A PROTO-ÆGIAN VASE. UPPER PORTIONS AND HANDLE



A PROTO-ARTIC VASE PRINCIPAL (LOWER) FRIEZE



PROTO-ATTIC VASE: SUGGESTED RESTORATION.



VASE FROM MELOR. DESIGN ON NECK.



SEALINGS FROM ZAKRO.



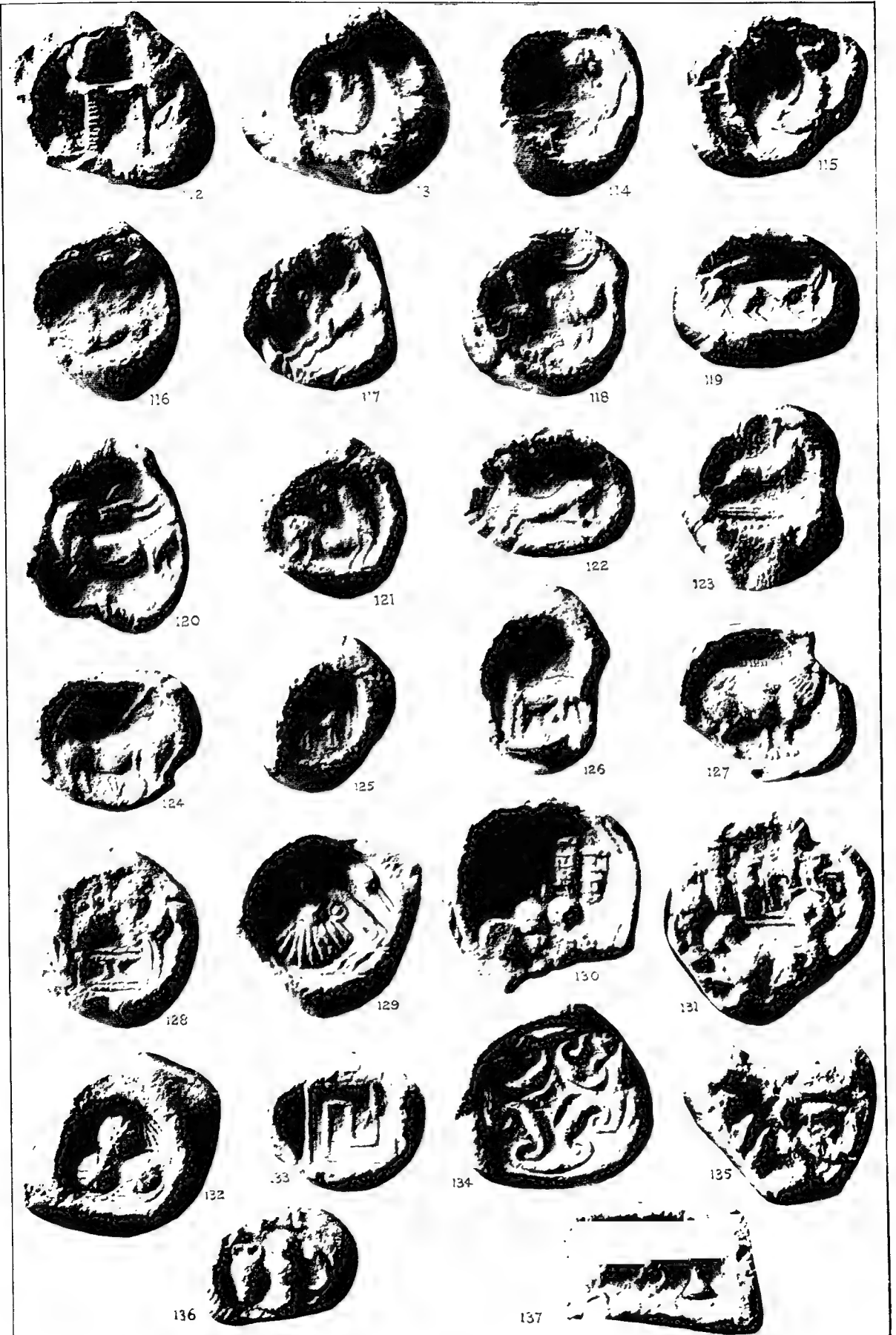
SEALINGS FROM ZAKRO



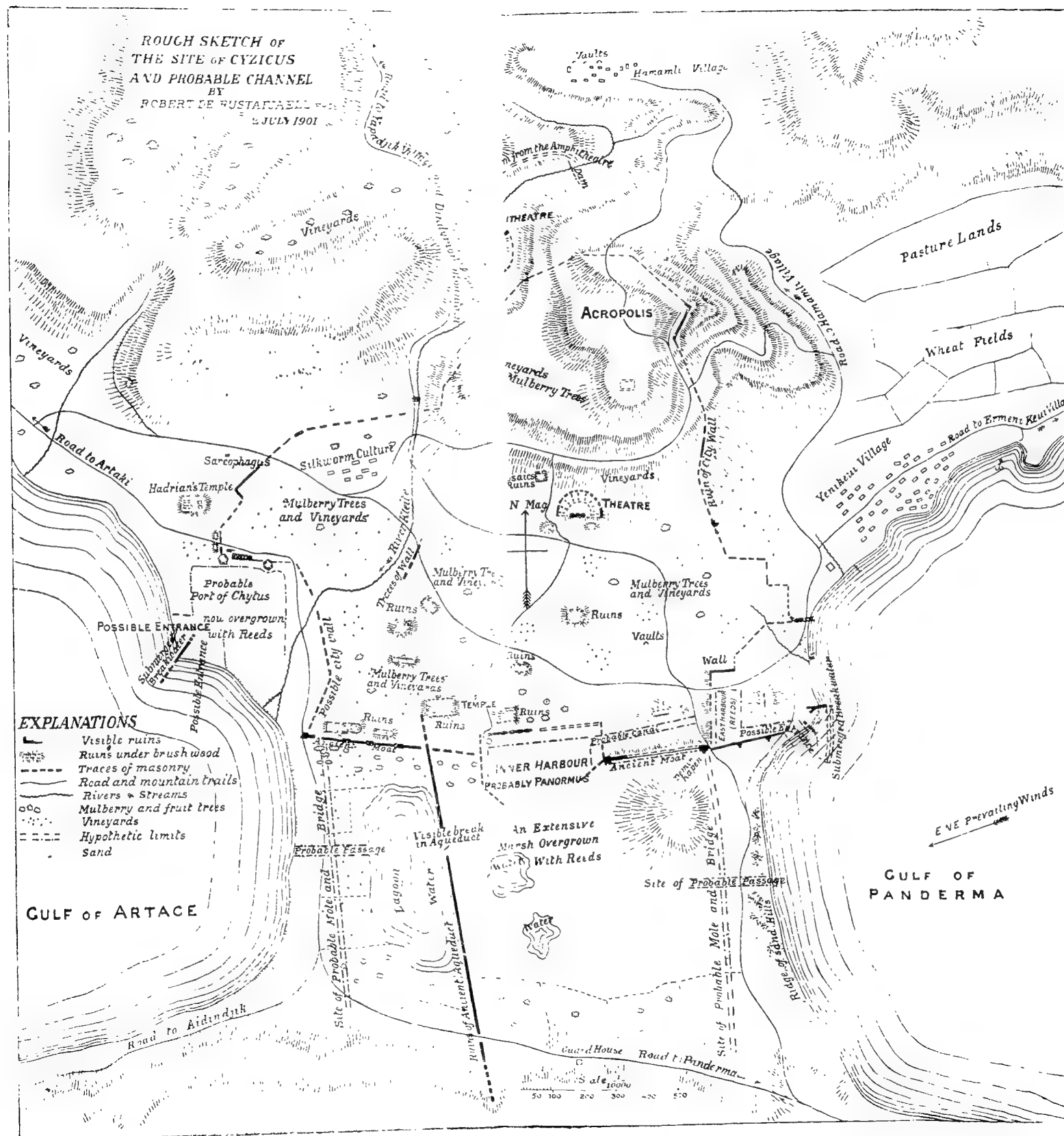
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SEALINGS FROM ZAKRO.



GREEK LYRIC METRE.

I.

πόθεν ἐπισσύτους θεοφόρους ἔχεις
ματαίους δῦας ;
τὰ δ' ἐπίφοβα δυσφάτῳ κλαγγᾷ
μελοτυπεῖς ὁμοῦ τ' ὀρθίοις ἐν νόμοις·
πόθεν ὄρους ἔχεις θεσπεσίας ὁδοῦ
κακορρήμονας ;

*These wild and passionate throes,
Whence rush they on thee thronging ?
Such terrors whence shure in harsh and awful song
And shrill wail ! What is it guides thy boding lips
On their ill-uttering path ?*

That, after all that has been written on the subject, I imagine to be still the question in the bosom of most readers when they are confronted with a piece of Lyric metre at all complicated. Those who are fortunate enough to have an ear for rhythm, and thus the capability of understanding, are still left, it seems to me, to hear a piece of metre as an uninstructed person hears a piece of music : though he may experience to a considerable degree a sense of vague and general satisfaction, he will lack the understanding of a musical adept. But a musician, hearing a sonata, follows what is being done ; observes the themes of which the composition is constructed ; notes the treatment of them, how they are developed, varied, and combined ; perceives their ethical significance, and feels intelligent artistic pleasure. For all that I can see, the books on lyric metre do not put a student in the position to do this. My knowledge of them is imperfect, and if I am doing an injustice I shall be very ready to repair it ; but from all that I am able to infer, they do not yet advance the student much beyond the condition of a person who has learnt his notes and keys and bars : they do not show him how a piece of metre is constructed ; do not teach him, in the language of musicians, *Form*.

Put away all *a priori* theories, and scan the metres with your ear : scan every piece of metre that you come across ; observe what rhythmical phrases are commonly combined together ; on what occasions they are used, and by what characters.

With one preliminary warning : lyrics, as they are printed in editions,

are divided as their various editors divide them. In Pindar and Bacchylides they have now, for the most part, been divided rightly; but our texts of the Tragedians are still full of wrong divisions, owing to respect for the divisions in the manuscripts. Disregard the manuscripts entirely. Different manuscripts divide the same metres in quite different ways; even the same manuscript is often inconsistent, not maintaining the same principles in its divisions; and these divisions themselves are often meant to indicate no more than what in Music you would call the *phrasing* and in Metre the *cacsura*. One tendency which misleads the scribes habitually into error is to place in the same line words which belong grammatically together.¹ Treat each stanza as though it were continuous, unless you have reason to suppose it not so,—for example, when you come to an *hiatus*; but if you find *hiatus* is avoided both in strophe and antistrophe, you may generally suppose the metre is continuous.

And observe also where any break after a syllable coincides in corresponding stanzas; as for instance in these lines, Soph. *Aj.* 693=706:

ἔφριξ' ἔρωτι περιχαρὴς δ' ἀνεπτάμην ἰὼ ἰὼ Πὰν Πὰν
ἔλυσεν αἰνὸν ἄχος ἀπ' ὀμμάτων Ἄρης ἰὼ ἰὼ νῦν αὔ

I venture to think that there is no one who will not be astonished to discover with what care such corresponding breaks are studied; they always indicate the phrasing, and before the end of this paper we shall see that their significance is often most important.

This is the method I have followed through the whole material of Greek lyric; and the main results I now proceed to give as principles of structure. For me these principles, when once discovered, have illuminated so much darkness that it would surprise me now to find a piece of choric metre which remained obscure. Prof. Blass gives up the metre of Bacchylides xv on Deianira²: 'κατὰ δάκτυλον ut videtur, certe magna ex parte; sed est maxima numerorum obscuritas.' I can honestly say that I find it quite intelligible: it contains dactylic phrases, but it belongs to a much-neglected class I shall not speak of in this paper but mean to deal with in my next,—*pæonic*.

I shall adopt from Dr. Christ the plan of placing dots beneath accented syllables and hyphens after syllables of extra length, as in Ar. *Vesp.* 275 εἴτ'

¹ Just, of course, as printers tend to do: for example, the first verse of Campion's song 'Kind are her answers, But her performance keeps no day; Breaks time as dancers, From their own music when they stray' should continue

All her free favours
And smooth words wing my hopes in vain;
but it is printed

All her free favours and smooth words,
Wing my hopes in vain.

and has escaped correction both by Mr. Bullen and Mr. Beeching.

² In his Preface (ed. 2 p. lxxviii) Prof. Blass describes this poem truly as a *lamentatio lugubris*, and asks how that could be in honour of Apollo. A possible answer is suggested by a note of Wernsdorf's on Himerius *Ecl.* xiii, 6 and 7, p. 213: 'Videtur Sophista hoc loco, ut in *Orat.* xiv, 10, abitum Flaviani sui comparasse cum reditu Apollinis ad Hyperboreos ac descripsisse cum laetitia Delphorum ob dei sui praesentiam, tum luctum eorum ob dei abitum: porro autem tetigisse fluvium Alpheum, cuius discessu similiter lugeant Elienses.'

ἐφλέγ—μηνεν αὐτοῦ, where for φλεγ in music there would be a dotted crotchet: and I shall borrow a few simple terms from Music, giving explanations of them. Let no one be afraid, in anticipation of imposing hieratic language; we shall have no use for the terminology of the grammarians,³ or for those blessed words '*choreic*,' '*logaoedic*,' which proceed so comfortably from the lips of Dr. Schmidt. No one with an ear need be afraid at all: though if he knows the rudiments of music he will apprehend perhaps more vividly; and I would ask him constantly to keep analogies of Music in his mind; for it appears to me that the principles of Form in modern music are the very principles then followed in Greek lyric metre.

The elements in rhythmical construction are not *feet*, but—to adopt the terminology of music—*phrases*. These are phrases, for example:

— √ — ∪ ∪ — ∪ — Glyconic
 ∪ ∪ — ∪ — — Anacreontic.

You may, if it pleases you, divide such phrases into feet, as the old grammarians were so fond of doing; all you will have achieved however will amount to just as little as if you had cut up a phrase of music into bars: it is only as a whole that such a phrase becomes an organism and conveys an intelligible idea. It might be called a *figure* or *Motiv*, the shortest coherent element in music, which Sir Hubert Parry in the *Dictionary of Music* describes thus: 'A *Figure* is any short succession of notes, either as melody or a group of chords, which produces a single, complete, and distinct impression. The term is the exact counterpart of the German *Motiv*, which is thus defined in Reissmann's continuation of Mendel's Lexicon:—"Motiv, Gedanke, in der Musik, das kleinere Glied eines solchen, aus dem dieser sich organisch entwickelt." It is in fact the shortest complete idea in music; and in subdividing musical works into sections, periods, phrases, the units are the figures, and any subdivision below them will leave only expressionless single notes, as unmeaning as the separate letters of a word.'

Of such rhythmical elements, phrases, motives, figures—or whatever you may choose to call them—there existed a variety in Greek; and they would be recognised in a moment by an educated hearer. What is important is that each brought with it an association; it suggested certain characters,—of gods, or heroes, or of nations; certain subjects; certain shades or regions of emotion. No one who knows anything of Greek feeling for appropriate form will find it difficult to believe that their rhythms too were used appropriately; and he would not be incredulous if this artistic feeling should appear to have guided sensitive metricians into the most delicate subtleties of touch.

Our first business therefore, if we mean to appreciate what is being done in choric metre, is to have learnt the various elements or phrases which lay to a composer's hand to use, and when they are introduced, to recognise them; the second is to know the associations which these various phrases carried with them.

³ If only they had had our system of musical notation they would never have been bewildering to us—or to themselves.

The broadest distinction of character in rhythms is between the *Dorian* and the *non-Dorian*. The non-Dorian may for the present purpose be classed together under the general names *Ionic*, *Asiatic*, *Eastern*, including Lydian, Phrygian etc.; Anacreon's belong of course to this division. All such are markedly different in spirit and associations from the rhythms which the Dorians made their own; these are so few and simple and so easy to be learnt that they may as well be stated here:

1 the *enhoplion* \asymp | $\dot{\text{—}}$ \cup \cup — \cup \cup $\dot{\text{—}}$ \asymp , a dactylic phrase in *tempo staccato*, beginning with or without the *anacrusis*.

2 the *epitrite*, most commonly in this arrangement $\dot{\text{—}}$ \cup — — , the movement in which Latin 'trochaics' naturally went.

3 (formed by combining 2 and 1) the *ductylo-epitrite* $\dot{\text{—}}$ \cup — \asymp $\dot{\text{—}}$ \cup \cup — \cup \cup — e.g. the beginning of the 4th Pythian, *σάμερον μὲν χρή σε παρ' ἀνδρὶ φίλῳ*.

Then there are two figures used to end a period:

4 $\dot{\text{—}}$ \cup — \asymp $\dot{\text{—}}$ \cup — , e.g. Aesch. *Pers.* 869, Ar. *Ran.* 825 *γηγενεῖ φύσῃματι*, Eur. *Cycl.* 371.

5 — \cup — \cup — — , e.g. Aesch. *Pers.* 873, Soph. *Trach.* 525 *προσμένουσ' ἀκοίταν*, Ar. *Ran.* 674 sqq., and Eur. *Andr.* 761:

οὔτοι
λείψανα τῶν ἀγαθῶν
ἀνδρῶν ἀφαιρεῖται χρόνος· ἡ δ' ἀρετὰ
καὶ θανοῦσι λάμπει.

The same figures are combined in the Stesichorean verses⁴ of Ar. *Pax* 775=796:

Μοῦσα σὺ μὲν πολέμους ἀπωσαμένα μετ' ἐμοῦ
τοῦ φίλου χόρευσον
κλείουσα θεῶν τε γάμους ἀνδρῶν τε δαίτας
καὶ θαλάσσης μακάρων· σοὶ γὰρ τὰδ' ἐξ ἀρχῆς μέλει.

Dorian metre moves in strongly-marked 4 time. To convey the nature of it in a single word, I should describe it as *Handelian*—in his square processions and martial songs.⁵

It was the expression of the Dorian temper, rigorous, energetic, masculine, severe; the appropriate vehicle for their ideals, *ἀρετά*, *ἀνδρεία*, *αὐτάρκεια*: appropriate of course also to the Dorian heroes, Heracles, the Dioscuri, Helen. Wordsworth's ode to Duty, 'Stern Daughter of the voice of God,' or Tennyson's upon the Death of Wellington could not have been written by a Greek except in Dorian metre; to write of *ἀρετά* or *ἀνδρεία* in Anacreontic would have been absurd and ludicrous. Dorian is the proper metre, as in the passage from the *Andromache* just quoted, in *Med.* 624, and in this fragment of Euripides (893)

⁴ The scholia are not correctly treated by Bergk on Stesichorus 35 and 36 p. 220.

⁵ Dorian metre in burlesque as Eur. *Cycl.* 367 sqq., Ar. *Ran.* 811 sqq., would have just

the same effect as the delightful Handelian burlesques of Sullivan; in *Princess Ida* for example, 'This helmet, I suppose, Was made to ward off blows.'

ἀρκεῖ μετρία βιοτά μοι
 σάφρονος τραπέζης,
 τὸ δ' ἄκαιρον ἅπαν ὑπερβάλλ-
 ον τε μὴ προσείμαν.

Accordingly the moral verses attributed to the Sages are in Dorian ;⁶ and this continued to be the metre used in philosophic verse, as in the fragments of Cercidas on Diogenes and σοφία (Bergk *Poetice Lyrici Græci* II p. 513), and in Aristotle's hymn to Ἀρετά (*ib.* p. 360):

Ἀρετά, πολύμοχθε γένει βροτείῳ,
 θήραμα κάλλιστον βίῳ,
 σᾶς πέρι, παρθένε, μορφᾶς
 καὶ θανεῖν ζαλωτὸς ἐν Ἑλλάδι πότμος
 καὶ πόνους τλῆναι μαλεροῦς ἀκάμαντας·
 τοῖον ἐπὶ φρένα βάλλεις
 καρπὸν ἰσαθάνατον⁷ χρυσοῦ τε κρείσσω
 καὶ γανέων μαλακαυγήτοιό θ' ὕπνου·
 σεῦ δ' ἔνεχ' οὐκ Διὸς Ἡρακλῆς Λήδας τε κούροι
 πόλλ' ἀνέτλασαν ἔργοις
 σὰν ἀγρεύοντες δύναμιν,
 12 σοῖς δὲ πόθοις Ἀχιλεὺς Αἴας τ' Αἶδα δόμον ἦλθον,
 σᾶς δ' ἔνεκεν φιλίου μορφᾶς καὶ Ἀταρνέος ἔντροφος ἀελίου χήρῳσεν
 αὐγὰς·
 τοιγὰρ ἀοίδιμος ἔργοις, ἀθάνατόν τε μιν αὐξήσουσι Μοῦσαι
 Μναμοσύνας θύγατρες, Διὸς ξενίου σέβας ἄζου-
 σαι⁸ φιλίας τε γέρας βεβαίου.

The *enhoplion* belonged especially to the Dioscuri (Ath. 184 f, Schol. Pind. *P.* ii. 127 Boeckh), and was therefore used in speaking of them; as by Pind. *O.* iii. 1

enhoplion
 Τυνδαρίδαις τε φίλοξείνοις ἀδεῖν καλλιπλοκάμῳ θ' Ἑλένῃ
 dactylo—epitrite

and *N.* x. 51. So in Eur. *Hcl.* 1479=1496

| | |
|--------------------------------------|----------------------------|
| δι' αἰέρος εἶθε ποτανοὶ | = μύλοιτέ ποθ' ἵππιον οἶμα |
| γενοίμεθα Δίβυες <ὥς> | δι' αἰθέρος ἰέμενοι |
| οἶωνοὶ στοιχάδες ⁹ ὄμβρον | λαμπρῶν ἄστρον ὑπ' ἀέλλαι- |
| λιποῦσαι χειμέριον | σι, παῖδες Τυνδαρίδαι, |
| νίσσονται πρεσβυτάτα | οἳ ναίετ' οὐράνιοι |

⁶ K. O. Müller *History of Greek Literature* I p. 251.

⁷ Wilamowitz-Moellendorf for καρπὸν εἰς ἀθάνατον (*v.l.* καρπὸν τ' ἀθάνατον): so in Aesch. *Ag.* 950 the MSS. give εἰς ἄργυρον for ἰσάργυρον, in Ath. 689 b εἰς ἄργυρον τις χεῖρα for ἰσαργυρόν τ' εἰς χεῖρα. The reading of v. 12 (*enhoplion* repeated) is due to the same scholar; the MSS. have Ἀἶδα δόμους.

⁸ Crusius for ἄρξουσai, *v.l.* αἰξουσai: so ἄζονται has been restored for ἄρξονται in *Pers.* 592.

The active ἄζονται is in *O.C.* 131.

⁹ The reading of the MSS. and of the Aldine too is στολάδες: I have corrected this and the metre at the same time. The editors follow the MS. which divides the words according to their grammatical construction

οἶωνοὶ στοχάδες
 ὄμβρον λιποῦσαι χειμέριον

The antistrophe is restored by transposition.

the opening is enhoplion for the Tyndarids in the antistrophe. Stesichorus used it in his palinode on Helen,

οὐκ ἔστ' ἔτυμος λόγος οὗτος
οὐδ' ἔβας ἐν ναυσὶν εὐσέλμοις epitrite
οὐδ' ἴκεο πέργαμα Τροίας.

An *Epode*¹⁰ corresponded to a *codā*. It was constructed, as a rule, out of the same rhythmical elements or phrases as the strophe; contained the same material, but arranged in a different and subtler combination. Since therefore it contains, as a rule, allusions to the material of the strophe, it often contributes towards making certain what the rhythmical elements of the strophe really are: conversely, we can often determine the metre of the epode from the strophe. Here is a very simple case from the epode of the Doric chorus which describes the fight between Heracles and Achelous, Soph. *Trach.* 497; it should be divided thus:

ἦν δ' ἀμφίπλεκτοι¹¹ κλίμακες ἦν δὲ μετῶ—
πων ὀλόεντα πλήγματα καὶ στόνος ἀμφοῖν
ἀ δ' εὐώπις ἀβρά epitrite
τηλαυγεί παρ' ὄχθῳ „
ἦστο τὸν δν
προσμένονσ' ἀκοίταν.

The first line is the normal dactylo-epitrite, but the MS. makes a complete line of the grammatical clause ἦν δ' ἀμφίπλεκτοι κλίμακες. The same thing is done by Nauck in a moral fragment (not necessarily Tragic) p. 867:

ὦ χρυσέ, βλάστημα χθονός, οἷον ἔρωτα βροτοῖ-σὶ φλέγεις,
πάντων κρατιστεύων, πολέμοις δ' Ἀρεως
κρείσσον' ἔχων δύναμιν, <τὰ> πάντα¹² θέλγεις·
ἐπὶ γὰρ Ὀρφείαις μὲν ᾠδαῖς
εἶπετο δένδρεα καὶ θηρῶν ἀνόητα γένη,
σοὶ δὲ καὶ χθὼν πᾶσα καὶ πόντος καὶ ὁ παμμήστωρ Ἀρης υ — —¹³

Besides other incorrect divisions, Nauck prints ὦ χρυσέ, βλάστημα χθονός, as though it were a separate line.

When Dorian metre is used by Orientals there is always a reason to be looked for. Thus the Chorus in *Tro.* 801 is about the sack of Troy by

¹⁰ Epodes belong properly to Dorian metre, and are usual with paeonic. All the purely Dorian odes of Pindar, except *P.* xii and *N.* ix, have epodes; all the rest that have none (*O.* i, iv, xiv, *P.* vi, *N.* ii, iv, *L.* viii) are in more or less varied Lydian or Ionic rhythms: so are the only three complete odes of Bacchylides that have not, iv, vi and xvii. The strophes of iii, which tells the story of the Persians and the Lydian Croesus, are in Lydian or Ionic, but

the epode is in Doric because it is addressed to Hiero of Sicily; and we are prepared for this by a Doric phrase (enhoplion) in the 2nd and 3rd lines of the strophes.

¹¹ Or ἀμφίπλεκτοι?

¹² Or <σύμ>παντα. The reading of the 2nd line is uncertain, but as I have written it, it is metre.

¹³ E.g. ὁπαδεῖ or λατρεύει: the metre is incomplete without this ending.

Telamon and Heracles; that in *Hec.* 889, a lament for the later fall of Troy, is partly in Doric for the Greeks:

891 τοῖον Ἑλλάνων νέφος ἀμφί σε κρύπτει
 911 κέλευσμα δ' ἦν κατ' ἄστν Τροί-
 ας τόδ', ὦ
 παῖδες Ἑλλάνων πότε δὴ πότε τὰν
 Ἰλιάδα σκοπιᾶν
 πέρσαντες ἤξετ' οἴκους;'
 925 epode τὰν τοῖν Διοσκούροις Ἑλέναν κάσιν Ἰδ-
 αῖόν τε βούταν

If the Chorus in the *Persae* of Aeschylus use Dorian metre for their long descriptive geographical account 855 sqq., it is because that was the metre which had been used by Stesichorus for such recitals; that is the reason it was used by Philoxenus also in his portentous catalogue. Another piece of Stesichorean Doric is a fragment of Aeschylus from the *Ἡρακλείδαι*: describing the expedition of Heracles against Geryoneus, the Chorus use the metre of Stesichorus in his *Γηρυονηΐς*; Aesch. *fr.* 74

 ἐκεῖθεν
 ὄρμενος ὀρθόκερως βοῦς ἤλασ' ἀπ' ἐσχατιᾶν
 γαίας, ὠκεανὸν περάσας ἐν δέπα χρυσηλάτῳ
 βοτῆράς τ' ἀδίκους κατέκτα δεσπότην τε τρίπτυχον
 τρία δόρη πάλλοντα χερσίν,
 τρία δ' ὤ- σάκη προτείνων τρεῖς τ' ἐπισσείων λόφους
 στεῖχεν ἴσος Ἄρει βίαν.¹⁴

So much for Dorian. To take one opposite example, metres appropriate to Dionysus were Glyconic, as Aesch. *fr.* 355, Soph. *fr.* 174, Eur. *fr.* 586, Pind. *fr.* 153; and Ionic *a minore* as *Bacchae* 64 sqq., Ar. *Ran.* 323 sqq.; for a *κῶμος*, the Anacreontic $\cup \cup - \cup - \cup - -$ as in *Cyclops* 491 sqq.

A stanza might be constructed entirely in one rhythm, as the 4th Pythian is in Dorian metre purely; or it might be made of two or more combined; or the briefest phrase even of a different metre might be introduced in passing, when it was appropriate to the sense: as in Soph. *Trach.* 953

εἴθ' ἀνεμόεσσά τις
 γένοιτ' ἔπουρος ἐστιῶτις αὔρα
 ἥ τις μ' ἀποικίσσειεν ἐκ τόπων ὅπως
 τὸν Ζηνὸς ἄλκιμον γόνον
 μὴ ταραβαλέα θάνοιμι μῶνον εἰσιδοῦσ' ἄφαρ

¹⁴ εστεισος αρηβιαν MS.; I give the correction of Weil, cf. Pind. *I.* ii. 16: ἴσος Ἄρει στεῖχεν βίαν would be as good, cf. Pind. *P.* iv. 8; but ἴστα χ' ἴσος Ἄρει βίαν would be a glyconic

line quite foreign to the metre. In the previous line τρία διὰ τῆς σάκου προτείνων awaits correction; I cannot scan Wecklein's τρία δὲ λαϊαῖς σάκη προτείνων.

At *v.* 4 this has lapsed insensibly into Dorian epitrite for describing Heracles, and abandons it again immediately.

Thus any phrase or figure carrying with it an association could be used precisely as modern music uses a *Leit-motiv* or 'guiding theme'; for explanation of which term I quote again Sir Hubert Parry: 'Leit-motive,' he says 'consist of figures or short passages of melody of marked character which illustrate, or as it were label, certain personages, situations, or abstract ideas which occur prominently in the course of a story or drama of which the music is the counterpart; and when the situations recur, or the personages come forward in the course of the action, or even when the personage or idea is implied or referred to, the figure which constitutes the leit-motif is heard.'

Metricianly accomplishment was shown in passing from one rhythm to another while keeping the movement going all the time. So far as I discover, there were three devices which enabled you to manage these transitions; (1) by *link*: (2) by *echo*: (3) by *overlapping*.

A connecting *link* or *copula* is a syllable interposed between two lines to enable the movement to be carried on without a rest. It is so designed that rhythmically it could belong to either line; but while it is common to them both, you are to feel that it is intermediate between them; so for the instruction of the ear it is made to consist usually, on the first occurrence, of a single separate word. But when the ear has thus been made to understand the phrases which the movement is constructed of, it does not need that explanation any longer, and succeeding strophes do not think it necessary to observe the separation of the link.—This is only one application of a general principle:—The first strophe states the metre plainly; afterwards, when the metre is firmly established in the ear, it can be trusted to accept the liberty of an equivalent variation. This will seem a matter of course to those who know anything of music.¹⁵—Examples of what I mean by *links* are marked off here by dotted lines:

Aesch. *Cho.* 379

= 393

τοῦτο διαμπερέως¹⁶
ἴκεθ' ἄπερ τε βέλος Ζεῦ
Ζεῦ κάτωθεν ἰάλλων¹⁶
ὑστερόποινον ἄταν

καὶ πότ' ἂν ἀμφιλαφῆς
Ζεὺς ἐπὶ χεῖρα βάλοι; φεῦ
φεῦ κάρανα δαΐξας,
πιστὰ γένοιτο χώρα.

¹⁵ 'Or of metre either' I might almost say; only that Bergk on *Nem.* vi. 7 p. 279 laid down exactly the opposite for Pindar,—that his metre gets more strict as it proceeds: 'in prima strophæ conceptio minus offendit, sed et enim poetæ deinceps severiore lege uti.' It would be strange indeed if it were so, but it is simply not the

fact.

¹⁶ I have no doubt that the readings given here are right so far as metre is concerned. In the *antistrophe* I take it there is an *anacoluthon* as in the *strophæ*: 'smite the heads, and that will be a pledge!' (or 'and let that be a pledge').

Soph. *El.* 480

. ἄδυπνόνων κλύουσιν
 ἀρτίως ὀνειράτων ἰ
 οὐ γάρ ποτ' ἀμναστεῖ γ' ὁ φύσας
 Ἑλλάνων ἀναξ
 οὐδ' ἡ παλαιὰ χαλκόπλακτος
 ἀμφάκης γένυς

Ar. *Vesp.* 273

μῶν ἀπολώλεκε τὰς ἐμβάδας ἢ προσ-
 ἐκοψ' ἰ
 ἐν τῷ σκότῳ τὸν δάκτυλόν που
 εἶτ' ἐφλέγ—μηνεν αὐτοῦ

Eur. *Hipp.* 752

κακονυμφοτάταν ὄνασιν,
 ἢ γὰρ ἀπ' ἀμφοτέρων
 ἢ ἰ Κρησίας ἐκ γᾶς δύσσορμις
 ἔπτατὸ κλεινὰς Ἀθίνας
 Μουνύχου δ' ἀκταῖσιν ἐκδή—
 σαντο πλεκτὰς πεισμάτων ἀρ—
 χὰς ἐπ' ἀπείρου τε γᾶς ἔβασαν.

In the following passage we have a rapid triplet as a link :

Eur. *Andr.* 136

γνώθι δ' οὐδ' ἐπὶ ξένας
 δμῳς ἐπ' ἀλλοτρίας ἰ
 πόλεος ἰ ξνθ' οὐ φίλων τιν' εἰσορᾷς

Echo is the ending of a line repeated as the beginning of the next. Thus in the following stanza there is a constant reiteration of the figure ο — which serves to begin lines 4 and 8 :

Bacchylid. iv

Ἦτι Συρακοσίαν φιλεῖ
 πόλιν ὁ χρυσοκόμας Ἀπόλλων
 ἀστύθεμιν θ' Ἰέρωνα γεραίρει
 4 τρίτον γὰρ παρ' ὀμφαλὸν ὑψιδείρου χθονὸς
 Πυθιόνικος αἰεῖδεται ὠκ-
 υπόδων ἀρετᾷ σὺν ἵππων.
 δύο τ' Ὀλυμπιονίκας
 8 αἰεῖδιν· τί φέρτερον ἢ θεοῖσιν
 φίλον ἐόντα παντοδαπῶν
 λαγχάνειν ἀπο μοῖραν ἐσθλῶν ἰ

¹⁷ ἡμῶν is the vulgate, but metrie requires ἡμῶν or ἡμῖν, and in cod. L ἡμῶν has been made from ἡμῖν. The same correction is to be made in *Trach.* 610 ὁ καλλιβόας τάχ' ὑμῖν αὐλὸς οὐκ ἀταρσία.

= 495

. μήποτε μήποθ' ἡμῖν ¹⁷
 ἀψεγὲς πελᾶν τέρας
 τοῖς δρῶσι καὶ συνδρῶσιν ἤτοι
 μαντεῖαι βροτῶν
 οὐκ εἰσὶν ἐν δεινοῖς ὀνείροις
 οὐδ' ἐν θεσφάτοις

= 282

ἐξαπατῶν ἔλεγεν θ' ὡς φιλαθήναιος
 ἦν ἰ
 καὶ τὰν Σάμῳ πρῶτος κατεῖποι

= 763

ἀπὸ νυμφιδίων κρεμαστὸν
 ἄψεται ἀμφὶ βρόχον
 λευκῇ καθαρμόζουσα δειρά
 δαίμονα στυγνὰν καταιδε—
 σθεῖσα τὴν τ' εὐδοξον ἀνθαιρ—
 ουμένα φάμαν ἀπαλλᾶσ—
 σουσά τ' ἀλγεινὸν φρενῶν ἔρωτα.

= 142

δεσποτῶν ἐμῶν· φόβῳ δ'
 ἡσυχίαν ἄγομεν
 τὸ δὲ σὸν οἶκτῳ φέρουσα τυγχάνω

¹⁸ This being mutilated, I have taken the first half from one strophe and the second from the other. In c. 16 *πάρεστιν νῦν* is rightly restored by Phot. Blass.

— ∪ ∪ ∪ | — : this is taken up in the next line and continues to *v.* 7, from which a return is made to the rhythm of the opening lines : *σιν βοτὰ καὶ | βοτῆρας ἱππονώμας = ἀγγελίαν | ἄτλατον οὐδὲ φευκτάν.*

The way by which the return is made from one rhythm to another in *v.* 7 is an example of the last and subtlest form of shift. I call it *overlapping*. You expect the rhythm to continue *κελαινῶις ξίφεσιν καὶ*, but *ξίφεσιν* affords an opportunity of continuing with anapaestic (or dactylic) movement, *ξίφεσιν βοτὰ καὶ* : so that what you get is a line of which the first part is in one rhythm and the last part in another, while the middle part is *common* to them both :

κελαινῶις ξίφεσιν βοτὰ καὶ

This device of *overlapping* enabled a metrician sometimes to get even a continuous *contrapuntal* effect of rhythm. The following from the *Prometheus Vinc-tus* is a very skilfully composed example ; where the Ocean Maidens are compassionating Prometheus in mournful Anacreontic measures.¹⁹ The chief subject is

— ∪ — ∪ — ∪ — — ∪ ∪ — ∪ — —²⁰

a well-known rhythm, *e.g.*

Ar. *Nub.* 949 νῦν δείξετον τῷ πισυνῶ | τοῖς περιδεξίοισιν

950 λόγοισι καὶ | φροντίσι καὶ | γνωμοτύποις μερίμναις.

Cratinus *fr.* 172 ἄνδρας σοφοὺς | χρὴ τὸ παρὸν | πρᾶγμα καλῶς |
εἰς δύναμιν τίθεσθαι.

But here, by repeating the first section thus,

— ∪ — ∪ — — ∪ ∪ — — ∪ — ∪ — ∪ ∪ — ,

it is so contrived that another Anacreontic phrase (2) ∪ ∪ — ∪ — ∪ — — is heard moving underneath against it :

| | | | | |
|-------|-----------------------------------|-------------------|---------------------|-----------|
| 130 | 1 μῆδ' ἐν φοβηθῆς | φιλία | 1 γὰρ ἤδε τάξῃς | π-ε-ρύγων |
| = 150 | λεῦσσε Προμηθεῦ | φοβερά | δ' ἐμοῖσιν ὅσσοις | ὀμίχλα |
| | | 2 | | 2 |
| | | | 1 θοαῖς ἀμίλλαις | προσέβα |
| | | | προσῆξε πλήρης | δακρύων |
| | 3 τόνδε πάγον πατρώας | | | |
| | σὸν δέμας εἰσιδουσα ²¹ | | | |
| | 1 μόγῃς | παρειπούσα φρένας | | |
| | πέτραις | προσαναϊνόμενον | | |

¹⁹ See the schol. on *v.* 130.

²⁰ The first section presently is numbered (1), the second (3).

²¹ Probably εἰσιδούσα or εἰσιδοῦσαν : then the metre is continuous throughout.

At 7 the ending — ο ο — is taken up with choriambic movement; while at 8 we begin to hear a sound of three consecutive long syllables, which recurs on several occasions; *Antig.* 781=791:

| | | | | | | |
|---|-----------------------------|------------------------|-------------------|------------------------------|------------------------|---|
| 1 | Ἔρως | ἀνίκατε μάχαν | 1 | Ἔρως | ὃς ἐν κτήμασι πίπτεις | 2 |
| | σὺ καὶ | δικαίων ἀδίκους | | φρένας | παρασπᾶς ἐπὶ λῶβα | |
| | 2 | | | 3 | | |
| | δς | ἐν | 2 | μαλακαῖς παρειαῖς | νεάνιδος ἐννυχεύεις | |
| | σὺ | καὶ | | τόδε νεῖκος ἀνδρῶν | ξύναιμον ἔχεις ταραξας | |
| | 4 | 5 | 6 | 4 | 5 | |
| 1 | φοιτᾶς | δ' | ὑπερπόντιος ἐν τ' | 8 | ἀγρονόμοις αὐλαῖς | |
| | νικᾷ | δ' | ἐναργῆς βλεφάρων | ἥμερος εὐλέκτρον | | |
| | | | 7 | | | |
| 7 | καὶ σ' οὐτ' | ἀθανάτων | 8 | φύξιμος οὐδεὶς | | |
| | νύμφας | τῶν μεγάλων | | οὐ τι πάρεδρος ²³ | | |
| | | | | 2 | | |
| 4 | 5 | 8 | | | | |
| | οὐθ' | ἀμερίων σέ γ' ἀνθρώπων | | ὁ δ' ἔχων μέμνην | | |
| | θεσμῶν, ἄμαχος γὰρ ἐμπαίζει | θεὸς Ἀφροδίτα | | | | |
| | | 4 | 5 | 6 | | |

Those who may care to pursue this method of analysis and wish for a good field to practise in will find it in the lyrics of *Antigone* which follow, in *El.* 1058 and in *Agam.* 693: except that *Ant.* 850=869 are both, I think, corrupted and should be

| | |
|---------------------------------|-------------------------------|
| ἰὼ δύστανος, οὐ | = ἰὼ κύρσας γάμων |
| βροτοῖσιν οὐτ' ἐν νεκροῖς, | ἰὼ κάσις δυσπότημων, |
| μέτοικος οὐ ζῶσιν, οὐ θανοῦσιν. | θανὼν ἔτ' οὐσαν κατήναρές με. |

There is a very beautiful example of transition in a passage of admirable metre which will serve at the same time to illustrate nearly all the principles I have advanced; *Aesch. Agam.* 686=702:

| | | | |
|---|--------------------------------------|---|--------------------------------|
| 1 | τίς ποτ' ὠνόμαξεν ὦδ' | 1 | Ἴλιῳ δε κῆδος ὀρθ— |
| | ἑς τὸ πᾶν ἐτητύμως | | ὠνυμον τελεσσίφρων |
| 2 | (μή τις ὄντιν' οὐχ ὀρώμεν προνοίαισι | 2 | μῆνις ἥνυσεν τραπέζας ἀτίμωσιν |
| | τοῦ πεπρωμένου | | ὑστέρῳ χρόνῳ |
| 3 | γλώσσαν ἐν τύχα νέμων;) | 3 | καὶ ξυνεστίου Διὸς |
| 4 | τὰν δορίγαμβρον ἀμφινεικῇ θ' | 4 | πρασσομένα τὸ νυμφότιμον |

²³ οὐχὶ πάρεδρος Dindorf. the MS. is τῶν μεγάλων πάρεδρος ἐν ἀρχαῖς, a variation without parallel in choriambic metre, and the contrary of the sense. Sophocles is alluding to the proverb θεσμὸν Ἔρως οὐκ οἶδε βιημάχος used by Paul. Sil. *A.P.* v. 193 in his clever answer to Agathias,

ib. 192. Δίκη, Θέμις, Νόμος, Αἰδώς are πάρεδροι of Zeus (*O.C.* 1267, 1382. *Pind.* *O.* viii. 21, *Plut. Alc.* 52, Orpheus in 'Dem.' 772. 2δ and *fr.* 18 in Proclus on *Alcib.* I.); but Ἔρως is not with them; Ἔρως is like Nature,—ἡ φύσις ἐβούλεθ', ἥ νόμων οὐδὲν μέλει *Eur. fr.* 920.

| | |
|------------------------------|---------------------------------|
| 5 Ἑλέναν; ἐπεὶ πρεπόντως | 5 μέλος ἐκφάτως τίνοντας, |
| 6 ἑλένανς ἑλάνδρος ἐλέπτολις | 6 ὕμειοι οὖν, ὃς τότ' ἐπέβρεπεν |
| 7 ἐκ τῶν ἀβροτίμων | 7 γαμβροῖσιν αἰεῖδεν. |
| 8 προκαλυμμάτων ἔπλευσε | 8 μεταμανθάνουσα δ' ὕμνον |
| 9 Ζεφύρου γίγαντος αὔρα | 9 Πριάμου πόλις γεραιὰ |
| 10 πολύανδροί | 10 πολύθρηνον, |
| 11 τε φεράσπιδες κυναγοὶ | 11 μέγα που στένει κικλήσκον— |
| 12 κατ' ἵχνος πλατῶν ἄφαντον | 12 σα Πάριν τὸν αἰνόλεκτρον |
| 13 κελσάντων Σιμόεντος ἀκτὰς | 13 τᾶμπροσθ' ἢ πολύθρηνον αἰῶν' |
| 14 ἐπ' ἀξιφύλλους | 14 ἀμφὶ πολιτῶν |
| 15 δι' ἔριν αἰματόεσσαν | 15 μέλεον αἶμ' ἀνατλάσα. |

Here we have three metres: *trochaic* with syncopation, 1-3; *Ionic a minore* or *Anacreontic*, 4-6 and 8-12; *glyconic* 6-7 and 13-15. These corresponding stanzas are constructed with such artifice,—there are so many antithetic meanings woven in so close a texture,—that I give a rendering designed to bring them out, endeavouring also to suggest something of the metrical effect; though not of course by use of the same metres, which in English has rarely that result:

Who named her all so shrewdly?
—Was't One beyond our ken,
By glimpse of Order fated
His happy lips who moved?—
This *Helena*, so rudely
Still warred about by men,
This bride with iron mated,—
Sure *Hell* *enow* she proved!
When lightly from the silken-tissued
Veils before her bower emerging
Forth to Eastward sail she issued,
Breeze of earth-born Zephyrus urging—
Forth to Eastward sail
Men swarming after, hot in quest,
Fierce myriad hunters, all addrest
With shields, that harrier-like pursued
Fast on a sightless trail, of oars
Beached upon Simois' leafy shores,
Full cry, in bloody feud!
Revenge will surely render
That pairing well-repaired;
Will make this *dear alliance*
Be all too dear for Troy!
Of high Zeus Home-defender
And friendly Table shared
Repays that prime defiance
On all that uttered joy;

So loudly once in gay carousal
 Bride with Hymen-song would honour,—
 Kinsmen, when the time of spousal
 Bade them heap their praise upon her—
 Ah but at this time,
 Though late the lesson, learned grown
 With age-long suffering of her own
 Sons' blood so lamentably shed,
 That ancient City loud, I ween,
 Laments, with practice-perfect *Threne*,
 'O Paris, evil-wed!'

The rhythmical elements are three, and to appreciate their dramatic significance we must consider strophe and antistrophe together. The opening trochaics in both cases are for the expression of their own stern moral and religious views, and this metre they continue till they come to painting Helen, when they shift by means of a *link*—a syllable kept studiously separate on the first occurrence—

γλῶσσαν ἐν τύχῃ νέμων
 τὰν | δορίγαμβρον ἀμφινεικῇ θ'

to *Anacreontic*, ο ο — ο — ο — —.²⁴ That is appropriate both for τὸ ἀβρόπλουτον and τὸ ἀβροπενθές: in the strophe it describes the sumptuous delicate luxurious Helen flying Eastward with her Asiatic lover; and is equally fitting in the antistrophe for the Asiatic banquetters and for their *threne*. But it will be observed that this rhythm is interrupted for a moment at v. 6: you expect it to continue ἐλέναυς ἔλανδρος ἄτα, but it shifts, by *overlapping*, to *glyconic*:

ἐλέναυς ἔλανδρος | ἐλέπτολις = ὑμέναιον ὃς τότ' ἐπέρρεπεν
 ἐκ τῶν ἀβροτίμων γαμβροῖσιν αἰεῖδεν

the break in each case being marked by the division of the words. The purpose of this transition becomes fully apparent in the antistrophe; for this glyconic was the metre of the refrain in *wedding-songs*:

Ῥμὴν ᾧ Ῥμέναι' Ῥμὴν,
 Ῥμὴν Ῥμέναι' ᾧ.²⁵

Thus in Eur. *I.A.* 1036 sqq. where the marriage of Peleus and Thetis is described, this is the natural conclusion of the stanzas:

1055 πεντήκοντα κόραι Νήρεως = 1076 Νηρηίδων ἔθεσαν πρῶτας
 γάμου εἰς ἐχόρευσαν Πηλέως θ' ὕμνον αἶον.

²⁴ Transition to this metre is always, I believe, prepared by ο — — preceding; therefore the corrupt verses Soph. *O.T.* 1210=1219 have yet to be restored correctly.

²⁵ Eur. *Tro.* 307 sqq., Ar. *Av.* 1731 sqq., Pax 1329 sqq., Catull. 61. 4, Plaut. *Casina* 799.

Our transition to this metre here might well have been accentuated both by melody and orchestration,—wood-wind at this point, since the *ύμέναιος* was accompanied by flutes, whereas Anacreon was *αὐλῶν ἀντίπαλος, φιλοβάρβιτος* (Critias in Ath. 600 c). It is just as though a phrase were introduced from some familiar Wedding-march. Then the ending *αἰδεῖν* enables the Anacreontic to be resumed at once without further preparation, and the change of metre sharply points the contrast in the sense, between the joyful *ύμέναιος* then and the melancholy *θρήνος* now.²⁶

Surely this is very beautiful.

The *Θησεύς* of Bacchylides opens with this prelude,

| | | |
|-----------------|---|--|
| xvii. 1 = 16 | 1 | $\overline{\beta\alpha\sigma\iota\lambda\epsilon\tilde{\upsilon}\ \tau\hat{\alpha}\nu\ \ \dot{\iota}\epsilon\rho\hat{\alpha}\nu\ \ \cdot\ \dot{\text{A}}\theta\alpha\nu\hat{\alpha}\nu}$ $\nu\acute{\epsilon}\omicron\nu\ \eta\lambda\theta\epsilon\nu\ \ \delta\omicron\lambda\iota\chi\hat{\alpha}\nu\ \ \dot{\alpha}\mu\acute{\epsilon}\iota\psi\alpha\varsigma$ |
| | 2 | |
| | 2 | $\tau\hat{\omega}\nu\ \dot{\alpha}\beta\rho\omicron\beta\acute{\iota}\omega\nu\ \acute{\alpha}\nu\alpha\acute{\xi}\ \ \cdot\ \dot{\text{I}}\acute{\omega}\nu\omega\nu$ $\kappa\hat{\alpha}\rho\nu\acute{\xi}\ \ \pi\omicron\sigma\acute{\iota}\nu\ \dot{\text{I}}\sigma\theta\mu\acute{\iota}\alpha\nu\ \ \kappa\acute{\epsilon}\lambda\epsilon\nu\theta\omicron\nu$ |
| | 1 | |

At 2 it lapses into a modification of glyconic; but the prelude is Ionic *a minore*, and this movement continues to the break at *ιερᾶν*. The meaning is apparent; for this metre more than any other meant '*Ionic*', and he is speaking of the *άβροβίων* *Ίώνων*.

The 7th Olympian of Pindar, for Diagoras of Rhodes, is in Doric rhythm with a slight exception. This is that famous ode which the Rhodians inscribed in golden letters in the temple of the Lindian Athena:

Φιάλαν ὥς εἴ τις ἀφνειᾶς ἀπὸ χειρὸς ἐλὼν
 ἔνδον ἀμπέλου καχλάζοισαν δρόσῳ
 δωρήσεται
 νεανία γάμβρῳ προπίνων οἴκοθεν οἴκαδε, πάγχρυσον,
κορυφὰν κτεάνων,
 συμποσίου τε χάριν κᾶδός τε τιμάσαις ἑόν, ἐν δὲ φίλων
 παρέοντων θῆκε νιν ζαλωτὸν ὁμόφρονος εὐνᾶς.

The only variation from pure Dorian here is the prelude—singular and remarkable—to the first line and the last. Each time, in the opening strophe, it is separated from the remainder of the line, which is the normal dactylo-

²⁶ μεταμανθάνουσα δὲ ὕμνον πολύθρνον *λη-
πει* locutiscens *flehte carmen* Bothe. Change
from the *ύμέναιος* to the *θρήνος* is a theme found
first in Erinna *A.P.* vii 712, and it became a
commonplace with later writers, *ib.* 52, 182,
183, 186, 188, Ach. Tat. iii. 10. Heliod. ii. 29,
Eur. *Alc.* 924-31. The point is made in our
passage with such care and so impressively that
it is somewhat surprising to find it has hardly
been perceived: Heusde compares Bion i. 87 and

Schneidewin *P.V.* 573. *τάμπροσθ' ἢ πολύθρνον
αἰῶν' ἀνατλάσα* means that she has acquired at
last (*γεραιά*, as *δψιμαθής*) the different strain of
πολύθρνος ὕμνος, her perfection in it having
been preceded by long practical experience (*πάθει
μαθοῦσα*) of suffering fitted for *lament* indeed.
τάμπροσθε was restored by Heusde (who under-
stood it somewhat differently); and *ἦ*, suggested
by Hermann and confirmed by Paley, seems to
me better here than *ἦ*.

epitrite, such as begins, for instance, the 4th Pythian. But the prefix $\cup \cup - -$ is Ionic *a minore*: and not only that, but it continues further in Ionic rhythm, $\phi\acute{\iota}\alpha\lambda\alpha\nu \acute{\omega}\varsigma \epsilon\dot{\iota} \tau\acute{\iota}\varsigma \acute{\alpha}\phi\nu\epsilon\iota$, $\cup \cup - - \vdash \cup - -$. That is often used in Ionic *a minore* (with the effect of *rallentando*) to conclude a period, as in Aesch. *Supp.* 1032=1040, *P.V.* 421=430, Ar. *Vesp.* 296=308; it occurs often in Ar. *Kan.* 320 sqq., and is among the Asiatic rhythms of the *Persae*:

952

=965

Ἰάνων γὰρ ἀπηύρα

ὀλοοὺς ἀπέλειπον

Ἰάνων ναύφρακτος Ἀρης ἐτεραλκῆς

Τυρίας ἐκ ναὸς ἔρροντας ἐπ' ἀκταῖς

981

=994

ἔ ἔ ἔ τλάμονες ἀσπαίρουσι χερσῶ

βοᾷ βοᾷ μελέων ἔντοσθεν ἡτορ.

And in Ar. *Thesm.* 101, where Agathon with his Chorus comes on singing, this is among his soft and delicate Asiatic phrases:

107 ΑΓ. ἄγε νῦν ὀλβιζε Μοῦσα

χρυσέων ρύτορα τόξων

116 ΧΟ. ἔπομαι κλήζουσα σεμνὸν

γόνον ὀλβίζουσα Λατοῦς

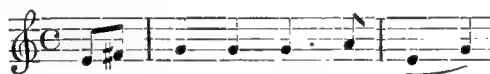
123 σέβομαι Λατὼ τ' ἄνασσαν

κίθαρίν τε ματέρ' ὕμνων

When therefore I was first attending to the metre of the 7th Olympian, the effect it suggested to my ear was an Asiatic phrase, merged presently, by *overlapping*, into Dorian:

φῖαλαν ὥς εἰ τις ἀφνειας ἀπο χειρος ἐλῶν

If you were to make two melodic figures, each to serve as a Leit-motiv, you might say, this shall be the Asiatic:



and this the Dorian:



Then you could combine the two, the one blending into the other, in this way:



Now if this is the true account,—if we have really an Ionic rhythm here,—there should, according to the principle laid down before, be some allusion to that rhythm in the epode. We turn, then, to the epode, and we find that it proceeds in Dorian metre till we come to the last line but one, describing Rhodes and her inhabitants:

καὶ παρὰ Κασταλία πατέρ᾽ ᾗ τε Δαμάγητον ἄδόντα Δίκη
 Ἄσις εὐρυχόρου τρίπολιν νᾶσον πέλας
 ἐμβόλῳ ναίοντας Ἀργεῖα σὺν αἰχμᾷ.

There is our Ionic plainly, $\cup \cup - - | \cup \cup -$ and $\cup \cup - - | - \cup -$, the second phrase repeating what we opened with, *φιάλαν ὥς εἴ τις ἄφν*. And this Ionic comes in momentarily, for *Asia*; while in the next line we return to Dorian epitrite for *Argos*. The meaning is apparent when you think of Rhodes; the connexion of it with the mainland was particularly close, but it was colonized by Argives; and the metre indicates this double character. Thus the first line symbolizes *Dorian with a tinge of Asiatic*, or *Asiatic overwhelmed beneath subduing Dorian*.

Aristotle is a good authority, and he tells us that Sappho wrote an answer to Alcaeus: Alcaeus having said *θέλω τι φείπην, ἀλλὰ με κωλύει αἶδως*, she replied

αἰ δ' ἦχες ἔσλων ἱμμερον ἢ κάλων
 καὶ μή τι φείπην γλώσσ' ἐκύκα κακόν,
 αἶδως κε σ' οὐ κίχανεν ὅππατ'
 ἀλλ' ἔλεγες περὶ τῷ δικαίως.

Bergk thought²⁷ that this line of Alcaeus was in the same metre and belonged to the same poem as another fragment quoted by Hephaestion, so that it should run:

ἰόπλοκ' ἄγνα μελλιχόμειδε Σάπφοι
 θέλω τι φείπην, ἀλλὰ με κωλύει αἶδως

the open syllables in *κωλύει αἶδως* coalescing. Be that as it may, there is no reason to doubt, and no one doubts, that the first line, an address to Sappho, was written by Alcaeus; and the metre is remarkable. Hephaestion calls it a *τρίμετρον ἀκατάληκτον περιπτεῦον συλλαβῇ τῇ τετάρτῃ, καλούμενον δὲ Ἀλκαϊκὸν δωδεκασύλλαβον*. Those who like may make it so: 'What is it? A learned man Could give it a learned name: Let him name it who can, The beauty would be the same.' What we see is that it begins as an Alcaic but its ending is the Sapphic, and the two metres are wedded in the closest way:

²⁷ Opinions on the question are well summarized by Prof. H. W. Smyth *Greek Melic Poets* (1906) p. 239. I quote a portion of Bergk's note *Poetae Lyrici Graeci* III p. 99: 'Cum Aristoteles, fide si quis alius dignus, testificetur poetriam haec rescripsisse Alcaeo, apparet necessitudinem, quae inter haec carmina intercedit, manifestam fuisse: itaque non dubitavi Alcaei versui quem Aristoteles adscripsit *θέλω τι φείπην ἀλλὰ με κωλύει αἶδως* praemittere versum eiusdem numeri quem servavit Hephaestio *ἰόπλοκ' ἄγνα μελλιχόμειδε Σάπφοι*, atque consentaneum est etiam Sapphonem in praegressa strophā Alcaeam nominatim compellasse. Animadversione digni etiam numeri utriusque

carminis: Alcaeus ad Sapphonem scribens Sapphico utitur versu sed hendecasyllabon anacrusi auxit, ut numeri lenitatem propria gravitate temperaret, ac videtur hoc metrum, quod novavit, in hoc uno carmine adhibuisse. Sappho Alcaeo rescribens praeter solitum Alcaicam stropham, cuius indoles a suae poesis natura abhorrebat, adhibuit. Haec igitur singularis ars, quam in numeris deprehendimus, consilium utriusque carminis egregie illustrat Aristotelisque testimonium planissime confirmat.' The same argument weighs strongly in my mind; though the significance of the metres I interpret differently.

Alcaic

ἰόπλοκ' ἄγνα μελλιχόμειδε Σάπφοι

Sapphic

A poetess from whom the language of metre was not hid could easily dispense with any more ; this little Valentine would tell its story quite intelligibly by itself: 'The Form, the Form alone is eloquent'!

As for Sappho's answer in Alcaics, there is no evidence that she used this metre elsewhere. If you were a woman and desired, while uttering a reproof in words, to acknowledge and return a compliment, would you write in your own proper metre or in his? For Sappho writes in his.

W. HEADLAM.

PHENEUS AND THE PHENEATIKÉ.

AT three o'clock on the afternoon of July 6th, 1901, I stood at the extreme edge of the col between Mount Skipieza and Mount Saita, staring with a mixture of incredulity, irritation, and interest at the scene before me. Where I had expected to see the lake of Pheneus, a blue expanse of twenty-five square miles of water, there lay a fertile stretching plain, for the most part a blaze of golden corn, while here and there a white point of light shewed where a fustanella'd harvester was at his peaceful toil. Nearer, the corn gave place to an ugly foreground of sun-cracked clay, while just at my feet, stretching from side to side of the narrowing valley, lay a mere ribbon of slate-coloured water—all that is left of the lake of Pheneus to-day.

I knew that such changes in its condition had been noted by travellers from Pausanias downwards, but this last and I believe final disappearance of the historic lake seems to have passed without notice in Athens and elsewhere. Believing that a short account of this singular natural feature of the Peloponnese and of the changes to which it has been subjected would not be wanting in geographical and historical interest, I made such survey and enquiries as were possible on the spot and have since collected what I could find written on the subject. The story of the lake or plain will be more readily intelligible by a brief description of the neighbourhood, which the accompanying sketch-map (Fig. 1) will make clear.

I.

The plain itself, its limits sharply defined by the surrounding mountains, is shaped and orientated somewhat like a miniature African continent. From N. to S. it measures about $7\frac{1}{2}$ miles; from E. to W. rather less—the measurement being taken at such a point as to include its western arm or bay.

The eastern barrier of the lake is a great southern spur of Mt. Kyllene which, stretching southward under the ancient names first of Saepia, then of Geronteion, then of Sciathis,¹ separates the valley of Pheneus from that of

¹ From a supposed similarity of names, Leake (*Travels in Morea*, iii. 142, 151) and most subsequent writers identify the ancient Sciathis with the modern Saita and consequently the ancient Oryxis with the modern Skipieza. Curtius (*Peloponnesus*, i. p. 187) transposes these identifications, thinking that Oryxis must mean the 'mountain of the canal,'

i.e. the mountain containing the S.W. Katavothra to which the canal or causeway of Herakles led. This seems in itself probable, and if Saita, like the other mountains' names of the district, *e.g.* Zereia and Skipieza, is a Slav word, it would hardly be a corruption of Sciathis.

Stymphalus. The pass to Stymphalus lies between Geronteion and Sciathis. This great outwork of Kyllene in its southern portion is to-day called Skipieza. Facing it on the S.W. side of the lake rises the mass of Saita, and due south of the lake, and consequently between Skipieza and Saita, is the steep track from Orchomenus by which Pausanias reached the Pheneatiké.

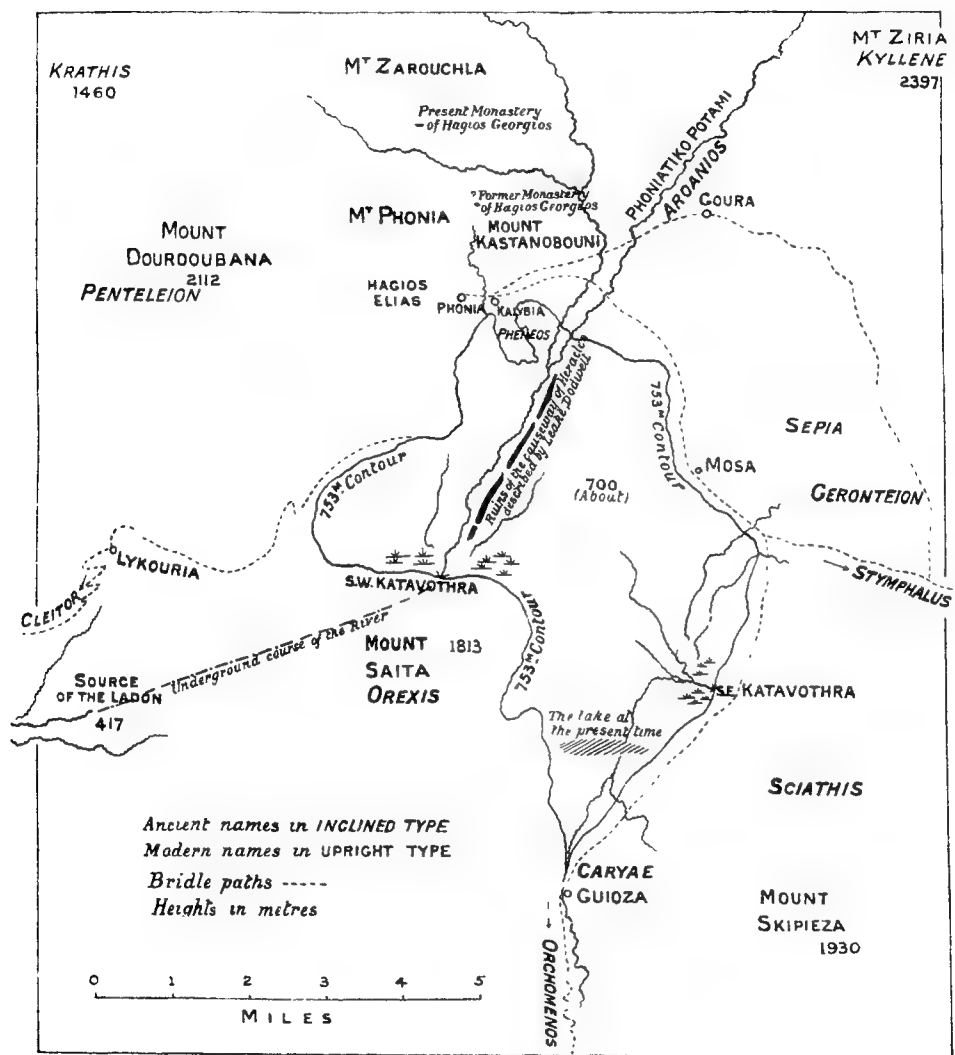


FIG. 1.—SKETCH-MAP OF THE DISTRICT OF LAKE PHONIA.

N.W. of the lake and overhanging ancient Pheneus and modern Phonia is Mt. Dourdoubana, which forms part of the chain called in antiquity Penteleion. Between this and Sauta lies the pass to Lykouria and Kleitor. Only at its northern angle is there any real break in the circle of the

hills. Here two streams formerly entered the lake side by side. Their present junction is to the S. of ancient Pheneus. Of these the Phoniatico Potami, called in antiquity the Aroanios or Olbios,² rises at the modern Karya,^{2b} which lies ten miles to the N.E. of the lake, and flows thence in a uniformly S.W. direction to Pheneus. The other, a smaller stream, winds down to the plain between the two spurs of Krathis now named after the villages of Phonia and Zarouchla respectively. The only other stream of any volume is the fine cataract that comes down the gorge of Guioza, the ancient Caryae or Caphyae, to the extreme south of the lake.

It will be seen from this enumeration that no other than a subterranean outlet is possible for the waters, and of these singular natural features of Arcadia there are two striking examples on the S.W. and S.E. of the lake, at points roughly corresponding, if the parallel of a miniature African continent be remembered, to the mouths of the Niger and Zambesi. In antiquity such an outlet was called, generally, *βάραθρον*; locally, *ζέρεθρον*. Its modern name is *καταβόθρα*. Of these Katavothrae Leake³ gives the most comprehensive list, and Philippson⁴ the most scientific account. They seem to be confined to the limestone area, and may take the form either of a porous layer through which the water percolates imperceptibly, or of a more or less open chasm into which it descends in a stream or cataract. In most cases the streams thus lost to sight have no recognisable outlet, and we must suppose that they disappear to feed the complex underground system of drainage and storage which belongs to the natural economy of the earth. Such outlets are unfortunately liable to various forms of obstruction. In the first place they may be choked by *débris*—trees, carcasses, and the like—carried thither in time of flood or storm. Not very successful efforts have been made to obviate this danger by placing gates or gratings of iron at the entrance. These have sometimes caused the very disasters they were designed to obviate, by arresting matter at the mouth of the channel, which might if left to itself have found its way safely through the underground outlet. Again, obstructions caused by a subsidence or other seismic movement have occurred, but such of these as have been observed have been of very temporary effect. Lastly, the most insidious and disastrous obstruction is that caused by the gradual deepening of alluvial deposit at the opening.

Of the two Katavothrae at Pheneus the S.W. is the more important. It is the main outlet of the waters, and the goal of the ancient canal and embankment, discussed below. But from its now indisputable connection with the source of the Ladon it is of fatal interest in the forgotten history of Olympia, now sleeping quietly in the sun forty miles away in Elis, but for centuries at the mercy of this terrible and unsuspected foe. As a rule the S.E. Katavothra formed as now the exit of the stream which descends from

² Possibly Olbios may have been the name of the Zarouchla tributary. The Anias of Strabo (*Geographica*, viii. 389) may be only a blunder for Areamos.

^{2b} The ancient *Caryae* is at the south of the

lake. See below.

³ Leake, *Travels in the Morea*, vol. iii. p. 155.

⁴ A. Philippson, *Peloponnesus*, vol. ii. p. 493 *sqq.*

Guioza. Its course underground is uncertain, but it may possibly be connected with Lake Stymphalus. Its position makes this probable, and I learn ^{4a} now that in 1899, when the Pheneus lake was fast falling, the lake of Stymphalus was remarkably full. I should imagine that on those occasions when the lake has emptied without doing damage in the Alpheios valley the main body of the waters have made their escape through this outlet—otherwise we must suppose that the alluvial deposit in Elis is now so deep that the waters even in flood-time do not rise above it.

Before turning to the history of the Pheneatiké there remains one



FIG. 2.—THE OLD WATER-LINE OF LAKE PHONIA
(Running to the left from the point marked \leftarrow).

most interesting feature to discuss. Travellers from Pausanias onward have noticed the existence of a sharply-defined line passing at an even level round the contours of the hills, at a height which has been very variously estimated.^{4b} This phenomenon, which is very striking when seen from a nearer point of view, is just visible in Fig. 2, reproduced from a photograph taken during the last subsidence of the lake and kindly lent by Professor Ernest Gardner.^{4c} The most natural explanation is that the line is, what

^{4a} From Mr. J. H. Hopkinson who visited the Pheneatiké at this date.

^{4b} Partly no doubt from the fluctuating level of the lake from which it has been calculated.

^{4c} I am also indebted to him for the other

photograph (Fig. 3) which gives a general view of the lake recalling something of the charm of this Arcadian Switzerland. The women in the foreground are digging gypsum.

Pausanias took it to be, the trace of an old water level. Leake⁵ thinks it to be too high for this, and suggests that it is due to the process of evaporation, adding that he has seen similar phenomena elsewhere. It is rather singular that Leake should bring forward this objection of too great altitude, as (1) he estimates the height of the marks at 50 feet above the plain, an estimate so erroneously *low* that it looks like a misprint for metres, and (2) he quotes with apparent belief a rumour that the water did on one occasion reach the height of 300 feet. Neither of these statements seems to be compatible with his view that the marks are too high to be a water level. A second



FIG. 3 —LAKE PHONIA.
(Women in the foreground digging gypsum.)

objection to the theory that the line is a water level, also noticed by Leake, seems to me to be more cogent. So sharply cut is the line that looking up at it one's natural impression is that the lake must have remained at that level and no other for ages together, to produce such clear, solitary, and lasting trace of its presence. Now it will be seen from the passages referred to below that the record of the lake where it exists suggests a directly opposite conclusion, viz. that its normal state is that of rising or falling.⁶

⁵ Leake, *Travels in the Morea*, vol. iii. p. 150.

⁶ Other possible indications of this are the

absence of fish in the lake and of any kind of aquatic tradition among the inhabitants.

It seems to me that the line as we see it shews the level to which for innumerable alternations the water rose before sinking. In what manner precisely that limit was fixed it is difficult to determine. Mr. J. H. Hopkinson has suggested to me that there may exist or have existed a second and higher channel (Fig. 4) communicating with the Ladon from the level of the lines which would thus become a *ne plus ultra* limit, and acquire as the ages

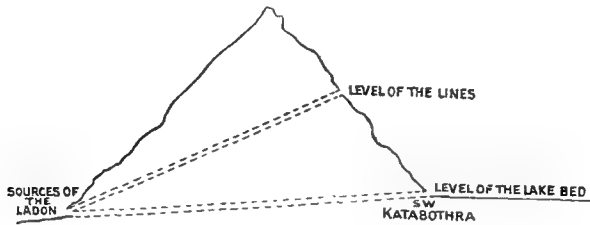


FIG. 4.

passed the sharp definition otherwise inexplicable in a fluctuating lake. Professor Ernest Gardner supposes that the subterranean passage does not continuously descend but rises in its course to the level of the lines (Fig. 5) forming a natural syphon which would prevent the waters of the lake from rising above the highest part of the hidden channel. But this, though it would fix an upward limit to the lake, and so account for the definition of

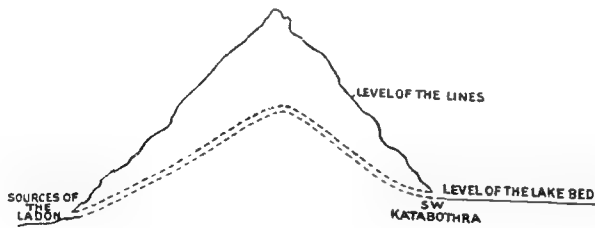


FIG. 5.

the lines, obviously would not suit the conditions observed and recorded in history, and indeed existing at the present time. We must therefore suppose that at some time anterior to the first records of the lake, the course of the channel which had produced the lines was modified, possibly by seismic disturbance, to its present condition, which from the absence of water in the lake bed must be one of continuous descent to the source of the Ladon.⁷

⁷ Another explanation was devised by W. G. Clark (*Peloponnesus*, p. 318) who thought that the line merely showed the juncture of two geological strata, but this seems to me impossible owing to its length and absolutely even

level. Philippson also, who writes with geological knowledge, is quite clear as to the line being a water-line. Clark is right however in saying that the lines do not appear at the north end of the lake.

II.

The natural features of the Pheneatiké being such as I have described, it seems probable that alternations between lake and plain have existed from a period long before the dawn of history.

Mythologic indications may be noticed first. Curtius conjectures,⁸ in a manner more familiar in the middle of the nineteenth than the beginning of the twentieth century, that the legend of Herakles descending from Pheneus to ravage Elis is a natural myth, and that we may recover in this story a lost record of some early outburst of the lake attended with the same fatal consequence for Olympia that we know to have followed in later history. But the association of the sojourn of Herakles in Pheneus with his descent upon Elis rests on very slight foundation—the fact that Pausanias⁹ saw the reputed tomb of Iphikles, brother to Herakles and his comrade-in-arms, on this Elean expedition, at or near Pheneus. Further, in the story of his sojourn in the Pheneatiké, Herakles plays the rôle of a Prometheus, the contriving friend of man, taming savage nature for his good, rather than that of a malignant natural foe. Indeed, his causeway or canal was meant to obviate the very catastrophe of which Curtius rather unkindly accuses him. There are, however, other interesting indications in the mythology of the district. The cults,¹⁰ as Pausanias enumerates them, seem peculiarly fitted to its singular character. Poseidon is a deity proper for a horse-feeding plain or a stretching sea, Demeter for peaceful cornland or for that underworld whose chasms yawn on either side the lake, Hermes for a folk more than any other at the mercy of the change and chance of life.^{10b}

The ancient citadel of Pheneus at the northern end of the lake is mentioned once by Homer¹¹ in the Catalogue, and once by Virgil¹² where Evander recalls the sojourn of Anchises and Priam at his Arcadian home. The citadel stood, as we learn from Pausanias, on what one still naturally speaks of as a peninsula jutting out from the N.W. angle of the plain. So inadequately does this insignificant conical hill fit the description of Pausanias, who speaks of it as precipitous on every side and requiring little artificial fortification, that as early as 1806 Dodwell tried to identify as the real citadel a height, bearing the omnipresent name of Elias, which rises above the modern village of Phonia. The remains here, however, appear to be of the least conclusive character, and it is scarcely probable that the acropolis in the ordinary sense of the word would be so far from and above the town

⁸ Curtius, *Peloponnesus*, vol. i. p. 188.

⁹ Pausanias, viii. 14.

¹⁰ Bursian, *Geographie von Griechenland*, ii. p. 199.

^{10b} He would not be less appropriate in his Arcadian character of the *νόμιος θεός*. See next footnote.

¹¹ *Il.* ii. 605. *ὁ δὲ Φένεδν τ' ἐρέμοντο καὶ Ὀρχομένον πολύηλον*. Homer's epithet wears well.

I gratefully remember a stirrup cup of sheep's milk given me by shepherds on Orchomenus when leaving for Pheneus.

¹² Virgil, *Aen.* viii. 165. Another survival of the Trojan connection with Pheneus is the burial-place of Anchises in the low ridge which separates the plains of Mantinea and Orchomenus.

proper. According to Leake, though it does not seem to be noticed by other travellers, the modern village occupied the ancient site till recent times. This occupation may in a measure account for the discrepancy between the account of Pausanias and the site as it is to-day. All traces of the lower town described by Pausanias as lying at the foot of the hill have disappeared. The stadion one would suppose lay in the valley of the Aroanius. There is hardly room for it elsewhere.¹³

It may seem strange that in the brilliant and crowded pageant of Greek history no event of importance either in peace or war is associated with what on the map of Greece appears as one of its most striking features. The natural battlefields of the Peloponnese, however, lie to the south, and, spacious arena as the lake bed seems, a commander might well hesitate to risk his force in the tortuous defiles which form its communication with the outer world.¹⁴ Again, these and its liability to periodic devastation may have made and kept it a small and isolated community in times of peace.

The earliest direct reference to the peculiar features of the lake seems to be a sentence in the writings of Theophrastus,¹⁵ the pupil, friend, and heir of Aristotle. From his remark that the various forms of vegetation at Pheneus, when destroyed by inundation, renew themselves on the same spots where they had formerly grown, we gather that in his day the alternations between lake and plain were fairly frequent. Eratosthenes, a Greek geographer of the next century quoted by Strabo,¹⁶ was aware that the S.W. Katavothra was connected with the source of the Ladon, and attributes in set terms the destruction of the site of Olympia¹⁷ to the waters of the lake escaping by that channel.

A comparison of the references by writers about the beginning of our era makes it seem likely that at that period the lake was full. Diodorus Siculus says that *in former times* the Aroanius was lost in a subterranean

¹³ As the name Pheneus is somewhat loosely used by several writers, I append a list of the localities which have at one time or other borne the name.

(i) The whole district of lake or plain with the hamlets on the enclosing mountains. This was called *Φερεατική* or *Φερεάτις* or *Φενική* in antiquity, and is to-day the *δήμος Φερεοῦ*.

(ii) The citadel on the conical hill jutting out into the lake at its northern angle. This was the acropolis described by Pausanias. It was inhabited until the eighteenth-century inundations.

(iii) The district near the lake bed at the foot of this hill. This was the *πόλις* described by Pausanias. Close to it is the modern village *Καλύβια*, which is, I believe, to bear in future the official name *Φερεός*.

(iv) The modern village of *Φορία*. This, with the adjacent hamlet of *Βίλια* overlooks the ancient citadel from the southern slope of Mt.

Domdoubana.

¹⁴ Polybius, *Histor. Reliqua* iv. 11, mentions the failure of an Achaean army to hold the pass between Stymphalus and Orchomenus in 221 B.C., and (iv. 70) gives an account of the successful passage of a Macedonian force in B.C. 218 through the same pass in the middle of the winter.

¹⁵ Theophrastus, *Hist. Plant.* iii. 1.

¹⁶ Strabo, *Geographica*, viii. 389.

¹⁷ This connection cannot be disputed. The necessity for an outlet of so considerable a stream as is inhumed at the Katavothra, the respective positions of this and of the Ladon spring, lying six miles apart, with a fall of about 850 feet between the two, and the correspondence between the diminution of the lake and the increase of the stream make this connection clear. Cf. L. Ross, *Erison . . . durch Griechenland*, p. 107. Cf. also Frazer, *Pausanias*, iv. p. 263.

channel, as if in his day it flowed into the lake. Plutarch¹⁸ rallies Apollo for his injustice in sending a plague of waters on the Pheneus *of his day*, for the theft of the sacred tripod a thousand years before. Aelian¹⁹ also alludes to it as a lake. All these scanty references may well refer to one and the same inundation. Pliny²⁰ implies nothing as to the condition in his time, but mentions alternations previous to his day. He attributes them all, probably erroneously, to seismic disturbance.

Pausanias²¹ gives us a fairly detailed and doubtless an accurate picture of the empty plain as he saw it, though he was unaware that the lake had existed so recently as the passages cited above would seem to shew.²² The canal of Herakles was, he says, 50 stades in length. The actual distance between Pheneus and the S.W. Katavothra is about $3\frac{1}{2}$ miles, so that if the measurement given is accurate we must suppose its *inception* to have been some little way up the Aroanius Valley. It was in his time 30 feet in height, where unbroken, and seems to have been not so much an artificial channel excavated in the plain, as a huge mound crossing the lake bed in a general direction from N.E. to S.W., and designed in the first instance to prevent an irruption of the waters into the E. and S. parts of the plain, and also to serve as a road or causeway. It no longer fulfilled its purpose in the time of Pausanias, being partly ruined, probably by the inundation mentioned above. Such causeways though of a ruder type and on a smaller scale are not infrequently found in Arcadia. One, which is, I think, ancient, crosses the northern plain of Orchomenos; another, which is of uncertain date, separates the plains of Tegæa and Pallantium.²³

From the day when Pausanias turned his horse's head to Pallene to the visit of Leake and Dodwell in 1806 the little valley has been without an historian.²⁴ We do not know what catastrophes there attended the great earthquakes of the sixth century, nor under what circumstances that deep, even layer of earth was deposited on the banks of the Alpheios, part of which, never since disturbed, yet stretches from the Hippodrome to the Leonidaion at Olympia.

There exist, however, a few scanty indications of the condition of the lake towards the eighteenth century. The earliest maps of Greece afford more of the allegorical glory of Venice and Amsterdam than the interior

¹⁸ Plutarch, *De sera numinis vindicta*, xii.

¹⁹ Aelian, *De nat. anim.*, iii. 58.

²⁰ Pliny, *Nat. Hist.*, xxxi. 54.

²¹ Pausanias, viii. 14, 1-3.

²² I am not surprised that this should be the case when I remember my utter failure to extract local information worth the name about the last disappearance of the lake, which cannot have happened more than *three or four years* before my visit. But cf. the table at the end of this paper.

²³ Pausanias, viii. 44, 5. Frazer, *Pausanias*,

iv. p. 419.

²⁴ I should imagine that the Pheneatiké when once its barrier of mountains is passed is much to-day what it has always been. The good Hegoumenos of Hagios Georgios shewed me with pride a dusty collection of the visiting cards of chance travellers—scarcely one for a decade of years. I can call to mind no other part of Europe where life has gone on through the centuries with seemingly so little change, so little interruption from the outside world.

features of the countries they represent, but two, a Dutch²⁵ and a German²⁶ map, published respectively in 1690 and 1720, certainly show the lake as a lake with the Ladon directly issuing from it. That the Venetians had fortified ancient Pheneus is probable, not only from the remains on the site but also from the numerous Venetian coins (Obv. Lion of S. Mark, Rev. Christ King) found in the neighbourhood.²⁷

Boblaye,²⁸ Neumann-Partsch,²⁹ Curtius,³⁰ and others all give records, derived probably from local tradition, of a very deep inundation early in the eighteenth century, in which an older monastery of Hagios Georgios, 300³¹ feet above the level of the plain, is said to have been submerged. It is possible however that this inundation has been greatly exaggerated.³² The altitude of the present monastery, and indeed of modern Phonia, would it is true seem to bear out the story, but Greek monasteries from both religious and political tradition are more often than not perched on almost inaccessible heights, and Phonia may have been placed where it is to escape malarial exhalation from the lake rather than the lake itself.³³ If the figures are correct, it is not easy to estimate the danger afforded by a huge leaky cistern, containing the vast volume of water implied in this measurement poised high above the Peloponnese.

When we come to the last century the record is fairly continuous. Leake³⁴ and Dodwell³⁵ who visited Pheneus in 1806 found a swampy plain still traversed, as when Pausanias saw it, by a partially ruined causeway. Gell,³⁶ who must have been there shortly after, speaks of this as 'a road conducted along a magnificent mound,' and gives a very interesting view of the lake (which is here reproduced, Fig. 6) under these circumstances. This however gives the impression that the causeway led to the extreme S. of the lake rather than to the S.W., Katavothra, which I do not think can ever have been the case.

²⁵ *The Peloponnesus*, G. and L. Valk, Amsterdam. 1690.

²⁶ *Id.* M. Seutter, Augsburg, 1720. Both these are in the British Museum. My faith in maps as contemporary evidence has however been shaken. The largest and most expensive of modern guides to Greece, published with all the resources of easy communication and travel at its command, gives in its 1901 edition a brilliant blue lake of some 25 square miles in extent where no lake exists at all. *Nimium ne crede colori*.

²⁷ Bursian, *Geographie von Griechenland*, ii. p. 200.

²⁸ Le Puillon de Boblaye, *Recherches géographiques sur les ruines de la Morée*, p. 153.

²⁹ C. Neumann und J. Partsch, *Physikalische Geographie von Griechenland*, p. 252.

³⁰ E. Curtius, *Peloponnesus*, ii. p. 189.

³¹ Neumann and Partsch, *loc. cit.* give the depth of the waters as 252 metres.

³² One weak point of the story is that the present monastery of Hagios Georgios is obviously older than the date assigned to the inundation. The situation of this monastery is surely one of the most beautiful in Greece. A curved bastion of Mt. Crathis reaches out nearly to the lake, rising out of an undulating mass of plane-trees, cypresses, and poplars, broken here and there by the scattered fields of the monastery, the irregular red-tiled roofs of which nestle high above under the very crest of the spur.

³³ 'Α. Μηλιαράκης. *Γεωγραφία του νομού Ἀργολίδος καὶ Κορινθίας*, p. 147.

³⁴ Leake. *Travels in the Morea*, vol. iii. p. 135 sqq.

³⁵ Dodwell. *Tours in Greece*, vol. ii. pp. 436-441.

³⁶ Gell. *Itinerary of the Morea*, p. 151 sqq. *Journey in the Morea*, p. 373 sqq. and Plate facing p. 380.

What happened in the valley, after these visits early in the century, seems to have been briefly this. Either Drama Ali,^{36b} the last bey of Corinth, or an inferior Turkish pasha who kept up some kind of fortress at Mousa on the E. side of the lake, placed iron gates or gratings over the mouths of the Katavothrae for the obvious purpose of preventing their obstruction. When the Pheneatiké was evacuated by the Turks, these gates were recklessly destroyed by the Greek peasantry in an outburst of indiscriminating hate for their former masters. The result was that shortly after the War of Independence the Katavothrae began to close and the lake began to rise.³⁷

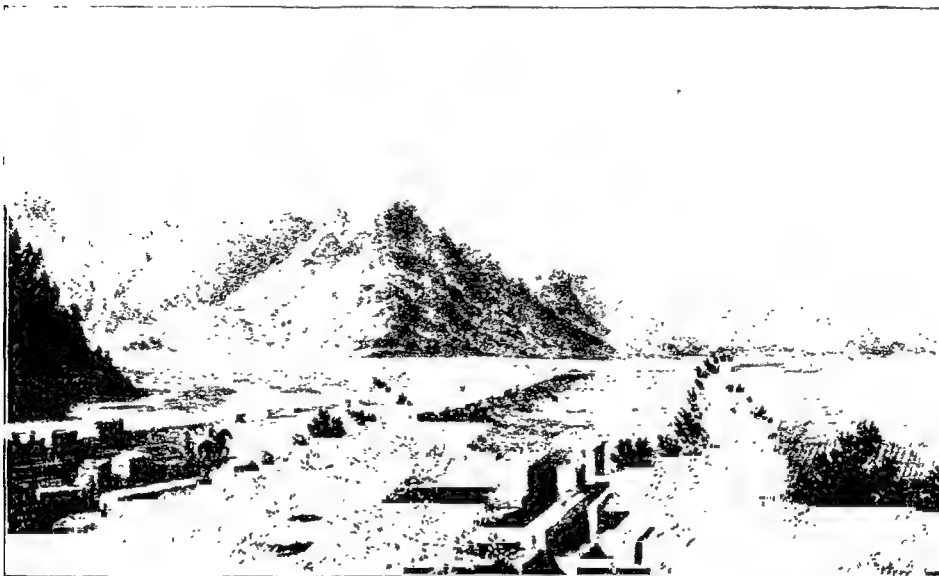


FIG. 6.—VIEW OF L. PHONIA.
(From Gell's *Journey in the Morea*.)

It was still rising when the French map³⁸ was made in 1829. Boblaye gives the height of the lake above the sea level as 753 metres, its depth being about 50 metres.

During this time the Ladon stream was dry. The water continued to rise till Jan. 1st, 1834, when the S.W. Katavothra suddenly opened, the Ladon became again a raging torrent, and part of the site of ancient Olympia was again flooded. This reappearance of their lost pastures coincided with the arrival of the newly chosen king of Greece, and was hailed by the inhabitants as a happy omen of the new era. The prosperity of Pheneus

^{36b} Neumann and Partsch, p. 252.

³⁷ This seems on the face of it more likely than the local tradition to the effect that the placing of these gates was a final act of malice

on the part of Drama Ali, and intended to cause the disaster that followed.

³⁸ *Carte de la Grèce*. . . . par les officiers du Corps d'État-Major. Paris, 1852.

was short-lived. Clark^{38b} was told that the malice of the people of Lykouria was the cause of the next rise of the lake. If this is true we have history repeating itself, for the control of the water supply seems to have been a fruitful cause of ill-feeling between the communities of S. Arcadia in classical times. But whatever the cause, the inhabitants in 1838 saw the waters again encroaching on the scene of their recent toil, and from that time forward all travellers describe it as a lake.³⁹ In the last inundation it seems to have reached its highest level about the year 1880. The last published account of the lake based on personal knowledge is that of Mr. Frazer,⁴⁰ who visited the Pheneatiké in the autumn of 1895, and devotes to the lake and its surroundings some of those passages of graceful and informing description admired by all readers of his Commentary.

The lake was sinking then and must have sunk rapidly since, for at the time of my visit,⁴¹ in July of this year, all that remained of it was a strip of slate-coloured water, perhaps 200 yards across, at the extreme southern end of the bed. A cairn on the level just below Guioza mentioned by Gell still exists, and at this point the water marks, if such they are, are extraordinarily clear. I put them at 150 feet above the plain, which accords fairly well with what other travellers have estimated. Either the remains of the causeway must have been hidden in the thickly standing harvest, or else the very ordinary trodden earthen track, along which I rode, but little above the level of the plain, must be all that is left of it. Certainly there is no conspicuous mound crossing the plain to-day where Leake and Dodwell would lead one to expect it.

Appended on the following page is a list of such fluctuations of the lake as have been recorded, with the authorities for them. Exact reference to these has already been made in the footnotes.

^{38b} *Peloponnesus*, p. 316.

³⁹ Most of these have been already cited, but cf. also :—

F. Aldenhoven, *Itinéraire descriptif de l'Attique*, p. 295 *sqq.*

W. Vischer, *Erinnerungen . . . aus Griechenland*, p. 494 *sqq.*

G. F. Welcker, *Tagbuch einer griechischen*

Reise, p. 302 *sqq.*

E. Beulé, *Études sur le Péloponnèse*, p. 147 *sqq.*

⁴⁰ J. G. Frazer, *Pausanias's Description of Greece*, iv. 230 *sqq.*

⁴¹ My observations on the spot were unfortunately but unavoidably very incomplete.

TABLE OF RECORDED FLUCTUATIONS OF THE LAKE.

| DATE. | CONDITION OF LAKE. | AUTHORITIES. |
|---------------------------------------|--------------------------|---|
| Before the Christian Era | Unrecorded alternations. | [Indications in Theophrastus and Eratosthenes]. |
| At some period between 1 and 150 A.D. | Full. | Diodorus Siculus. Plutarch. Aelian. |
| Cir. 175. | Empty. | Pausanias. |
| Between ancient and modern times. | Unrecorded alternations. | [Indications :—The great earthquakes of 522, 561. The abnormal inundations at Olympia.] |
| Early part of eighteenth century. | Very full | Some early maps. Boblaye. Neumann and Partsch Curtius. (All apparently from local tradition). |
| 1806-1820. | Empty. | Leake and Dodwell. Gell. |
| 1820-1834. | Rising. | The French Staff Map. Neumann and Partsch. |
| Jan. 1st, 1834 | Sudden fall. | { Boblaye, Aldenhoven, Welcker, Beulé, Curtius, Vischer, Clark, Bursian, Neumann and Partsch, Philippson, Meliarakes, Frazer. These authors write in varying degree of fulness, but from a consensus of their remarks these dates may be relied on. |
| 1834-1838. | Empty. | |
| 1838-1880. | Rising. | |
| 1880-1895. | Falling. | Frazer. |
| 1901 July-August. | Empty. | Local information communicated to the author. ⁴² |

⁴² I learn this from my friend Mr. Christos Lazaropoulos of Levidi near Orchomenos, who since this paper was written was so kind as to send me further particulars. The last disap-

pearance of the lake was, as before, due to natural causes, but steps are said to have been taken to keep the Katavothrae permanently open.

JOHN H. BAKER-PENOYRE.

ANTIOCHUS III AND HIS TITLE 'GREAT-KING.'

IT is not generally realized that to speak of Antiochus III—the Antiochus who makes a figure in Roman History—as Antiochus *the Great* is strictly speaking incorrect, although, as a popular form of speech, it goes back to the time of Polybius,¹ and is even found on some monuments.² Other monuments give us the form which is obviously the more correct, the official, form. The Seleucid kings had, it is well known, official surnames. We find them on their coins or in inscriptions along with their title *Βασιλεύς*. The three elements of their designation have their regular order—title, personal name, surname, *e.g.* *Βασιλεύς Σέλευκος Φιλοπάτωρ*. But in the case of Antiochus III the inscriptions of most authority, which give his designation in full, have *not* *Βασιλεύς Ἀντίοχος Μέγας* but *Βασιλεύς μέγας Ἀντίοχος*.³ That is to say, *Μέγας* is not really a *surname* at all: but Antiochus III is distinguished by a modification of his *title*: he is not simply 'King' but 'Great-King.' The popular form is especially misleading to us who have the way of calling kings *the Great* to imply vaguely some sort of personal pre-eminence, as when we speak of Alfred the Great, Frederick the Great, &c. The title 'Great-King' has quite a definite significance.

Long before, when the leading civilization of Asia was that on the Euphrates or Tigris, the paramount sovereign there used as one of his chief titles that of *Great-King* (*šarru rabû*),⁴ and occasionally the title 'King of kings' (*šar šarrâni*) or 'Lord of kings.'⁵ These titles carried with them the definite connotation of *holding the chief power in that group of lands which centred in Babylon*, just as Emperor or Augustus in a later age meant the Emperor of Rome. And just as in the West the barbarian conqueror adopted the Roman tradition and became Emperor Augustus,⁶ so in the East in the sixth century B.C. the Persian dynasty which conquered the Babylonian Empire took over the two titles of 'Great-King' and 'King of kings.'⁷ Among the Greeks before Alexander, as every one knows, *ὁ βασιλεύς ὁ μέγας*

¹ iv. 2, 7.

² *E.g.* C.I.G. No. 4458.

³ Michel, Nos. 467, 1229, 1297. *Βασιλεύς Ἀντίοχος Μέγας*, so far as I know, never occurs. Where the *βασιλεύς* is omitted, we find *Ἀντίοχος Μέγας*, as in C.I.G. No. 4458. This is natural, since something is wanted to distinguish him from other kings of the name, and his title being omitted, the distinctive part

of it is used *in place of a surname*.

⁴ *E.g.* Inscription of Sennacherib, Schrader, *Keilinschrift. Bibliothek* ii. p. 80.

⁵ Tiele, *Babylonisch-assyrische Geschichte*, p. 493.

⁶ Bryce, *Holy Roman Empire*, Appendix, Note C.

⁷ Spiegel, *Die altpersischen Keilinschriften*.

always meant the Achaemenian king.⁸ The other title, 'King of kings,' was also not unknown to the Greeks. A rescript of Darius Hystaspis to a certain Gadatas in Asia Minor begins: βασιλεὺς βασιλέων Δαρεῖος ὁ Ὑστάσπew Γαδάτα δούλω τάδε λέγει.⁹

Now it is a remarkable thing that during the Macedonian supremacy *these titles are in abeyance*. No Seleucid, so far as I know, is styled 'King of kings' even in Babylonian documents. The ruler is plain King (šarru).¹⁰ The most fulsome document is that put up by the Babylonian priests for Antiochus I which begins: 'I am Antiochus, the Great-King, the Mighty King, the King of the armies, the King of Babylon, the King of the lands (šar mâtâti), the restorer of Isagil and Izida, the princely son of Seleucus, the Macedonian King, the King of Babylon.'¹¹ It will be noticed that even here, among the various titles, that of 'King of kings' does not appear. In Greek documents, which, of course, are better evidence for the usage of the court than those drawn up by Orientals, we also fail to find the Seleucid king described as βασιλεὺς βασιλέων. He is only occasionally βασιλεὺς μέγας. These exceptional cases are noteworthy. One is that of Antiochus III. The other is that of Antiochus VII (Sidetes) who is called βασιλεὺς μέγας in an inscription of Delos.¹² Antiochus III, we know, got his title from his restoration of the Empire in the East. When Antiochus VII mounted the throne (B.C. 138) Iran and Babylonia had been conquered by the Parthian. It was his great achievement to reconquer them for the last time for the house of Seleucus. In both cases where Seleucid kings have the title βασιλεὺς μέγας it is where *there is a special reason for emphasizing the Eastern dominion*.¹³

This is borne out by other instances of the use of the title outside the house of Seleucus.

(1) In the inscription put up in honour of Ptolemy III Euergetes (246-222) by an Egyptian official at Adule,¹⁴ Ptolemy is called βασιλεὺς μέγας. What was this Ptolemy's chief title to fame? *His conquest of the East* 'as far as Bactria.'

(2) The title is adopted by the Arsacid kings—according to Mr. Percy Gardner's classification, by the first king who established himself in Parthia (about 248); according to the more recent view of Mr. Wroth,¹⁵ by a king in the earlier part of the second century. In any case, it was the ambition of the Parthian kings to represent themselves as the successors of the Achaemenians, the paramount Kings of the Nearer East.

(3) The title is found on the coins of Eucratides (190-160), whose realm was Further Iran, but who could as legitimately represent himself as the

⁸ Hdt. i. 188 &c.

⁹ Michel, *Recueil d'Inscriptions Grecques*. No. 32=Hicks and Hill, No. 20.

¹⁰ Strassmaier, *Zeitschr. f. Assyriol.* viii (1893), p. 106 f., cf. Schrader, *Sitzungsb. d. Berlin. Akad.* 1890, p. 1331.

¹¹ *Kleininschrift. Bibliothek* iii., p. 136.

¹² Michel, No. 1158.

¹³ Cf. Justin xxxviii, 10, 6 (of Antiochus vii). 'Tribus prelus victor cum Babyloniam occupasset, magnus haberi coepit,' where we see the same popular perversion of the title as in the case of Antiochus III.

¹⁴ *C.I.G.* No. 5127=Michel No. 1239.

¹⁵ *Numismatic Chronicle*. Third Series, vol. xx (1900), p. 181 f.

successor of the Achaemenians as the German ruler of the Middle Ages could represent himself as the successor of the Caesars.

(4) The rebel satrap Timarchus (about 162–160) calls himself βασιλεὺς μέγας. His realm was Babylonia and Media.

The other title, 'King of kings,' βασιλεὺς βασιλέων, although eschewed by the Greek kings, was revived in the East. It ultimately replaces that of βασιλεὺς μέγας upon the Parthian coins.¹⁶ It was adopted by Tigranes of Armenia, whose conquest of the Seleucid kingdom (in 83) gave him a claim to inherit the Seleucid pretensions to the Empire of the East.¹⁷

Of course, after this time the imperial style became fashionable at the Eastern courts and was affected by kings who could not possibly represent themselves as the paramount Kings of the East. Pharnaces II of Pontus (63–47) combines both the titles we have been considering and calls himself on the coins βασιλεὺς βασιλέων μέγας Φαρνάκης. Even the king of the petty mountain state, Commagene, is βασιλεὺς μέγας Ἀντίοχος.¹⁸ But these kings had at any rate the excuse that they reckoned Achaemenian and Seleucid kings among their ancestors,¹⁹ and reigned over what had once been part of those ancestors' realm. There was less justification in the case of the degenerate Ptolemy (Ptolemy Auletes, 81–58), who appears by inscriptions to have been called on occasion βασιλεὺς μέγας.²⁰ But to this improper use of the imperial titles we again find a parallel in the West—the use of the titles *Imperator*, *Augustus*, and *Basileus* (which then meant Eastern Roman Emperor) by the English kings in the tenth century.²¹

We also find persons writing without official authority applying the traditional Oriental titles to the Greek kings. The Pseudo-Aristeas calls Ptolemy II βασιλεὺς μέγας.²² In the Phoenician inscriptions put up by private individuals in Cyprus under Ptolemy II we find the King called, 'Lord of Kings' (adôn melakim).²³ But this naturally proves nothing for the usage of the court.

Why did Seleucids and Ptolemies adhere to the plain title of βασιλεύς? To understand this, we have again to note that βασιλεύς had in their case a special implication. When Antigonus first called himself King in 306, there was *in theory* no division of the Macedonian realm. Antigonus assumed the title as being *King of the Macedonians*, the heir of Alexander.²⁴ So in the case of his rivals, when they followed suit, it was to the Macedonian kingship that

¹⁶ Its first appearance in the Parthian series is on coins which were assigned by Mr. Gardner to Mithridates I (174–136), but which Mr. Wroth gives to Mithridates II (123–88). It is found on coins of the Indian rajah Maues about 120.

¹⁷ The coins on which Tigranes uses it are those struck in Syria.

¹⁸ Inscription of Nimrūd Dagh, Michel, No. 735.

¹⁹ Cf. Justin xxxviii, 7, 1: Inscription of Nimrūd Dagh.

²⁰ Strack. *Dynastie der Ptolemäer*, Nos. 154

and 155.

²¹ Freeman, *History of the Norman Conquest*, vol. 1³ p. 548 f.

²² § 29. In other passages § 35, § 41 the plain βασιλεύς is found.

²³ *C. I. Semit.* Pt. i. Tom. i. p. 112.

²⁴ Of course the general sense of βασιλεύς continued common. But in the case of the great Macedonian houses (those of Antigonus, Seleucus, &c.), it had in the first instance been adopted as implying succession to the Macedonian throne.

they laid claim. Demetrius the son of Antigonus refused to recognize the royalty of the other kings.²⁵ Of course, *in practice*, each king had ultimately to acquiesce in a certain territorial sphere, but βασιλεύς nevertheless meant *Macedonian King*, and such expressions as βασιλεύς τῆς Συρίας, τῆς Αἰγύπτου, &c., are merely convenient popular descriptions, never officially used. 'The Empire of Alexander we have still, in spite of its divisions, to regard as a single whole. . . . The divisions had followed each other in such quick succession, that they were unable to form stable territories with fixed frontiers and clearly marked characteristics. . . . Each one of the new kings held himself entitled to increase his share according to his power and opportunity, or even to advance a claim to the whole.'²⁶ Yet again, we find a parallel in the Roman Empire. In the Middle Ages, when there was an Eastern, as well as a Western, Emperor, each in theory regarded the other as a usurper, whilst in practice they might enter into friendly relations.

To be βασιλεύς therefore was to be a Macedonian, an Hellenic, king: to be βασιλεύς μέγας was to be an Oriental one, the successor of the Babylonians and Persians. The plain title was the prouder. Just so to-day King Edward sets his title of *Britanniarum Rex* before that of *Indiæ Imperator*.²⁷

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²⁵ Plutarch, *Dem.* 25.

²⁶ Niese. *Geschichte der griech. u. maked. Staaten*, ii. p. 123.

²⁷ My thanks are due to Mr. G. F. Hill and

Mr. Wroth for their help in verifying the numismatic data, adduced in this article. and to Mr. R. C. Thompson for similar help in respect of the cuneiform inscriptions.

THE CULTS OF OLBIA.

PART I.

THE object of the present essay is to bring together whatever fragments of evidence we possess which may throw light upon the cults of Olbia, the colony founded by the Milesians at the mouth of the Borysthenes about 647 B.C.¹ But by way of preface it may be worth while briefly to indicate the claims that Olbia has to be the subject of special study. All the Greek settlements on the North coast of the Euxine must have had in common many



FIG. 1.—MAP OF THE DISTRICT ROUND OLBIA.
(After Latyshev.)

traits which marked them off from Greek colonies elsewhere, but Olbia, while in many respects it may be regarded as a typical city of the locality, was also undoubtedly possessed of an individuality of its own. Though not actually the most northerly of all Greek settlements, which distinction belongs

¹ So Eusebius (Hieron.). Cp. Busolt, *Gr. Gesch.* ii.² p. 483, note 4. Holm (*History of Greece*, English trans., i. 296), says: 'The dates of the founding of the eastern colonies [of Miletus]

require fresh investigation.' The date above given may however be considered as approximately correct. See Strabo, vii. 306.

to Tanais, at the mouth of the river of the same name, yet Olbia so far outstripped Tanais in importance that it may fairly be regarded as the most northerly point where Greek civilization attained to an imposing height. That such a height was reached at Olbia is clear from the narrative of Herodotus, as well as from the other sources within our reach. Greek civilization under a northern sky must have meant something quite different from what it did in the Southern Mediterranean: can we at this distance of time find out in what this difference consisted, and obtain an idea of the citizens of Olbia at all approaching in vividness that which we possess of the inhabitants of the Greek islands or of Sicily? Probably this is an ideal which cannot be realised, but the problem is interesting enough to attract attempts at solution. Beloch's theory² that true Greek colonisation was impossible in a district where the olive and vine either did not exist or flourished only in sheltered places, and that nothing but bitter want or desire of commercial gain could make Greeks go so far from their southern home, is surely untenable, at least in the extreme form in which he states it. It is true that Herodotus³ mentions the extreme rigour of the winter, but he also⁴ speaks with enthusiasm of the beauty and productiveness of the Borysthenes, and its basin. From Herodotus, of course, we get a description of the material value of the soil, rather than of the scenic loveliness of the river, but from a modern traveller we may take a sentence or two to illustrate the beauty as well as the commercial importance of the Borysthenes:—

"After having spread out to the breadth of nearly a league, it [the Dnieper, *i.e.*, the Borysthenes] parts into a multitude of channels that wind through forests of oaks, alders, poplars, and aspens, whose vigorous growth bespeaks the richness of a virgin soil. The groups of islands, capriciously breaking the surface of the waters, have a melancholy beauty and a primitive character scarcely to be seen except in those vast wildernesses where man has left no traces of his presence."⁵

The last sentence almost of necessity calls up the Thousand Islands, and in natural sequence, Quebec and the other Canadian settlements even further north, where so many Frenchmen spent their lives, and became the founders of colonial families. If Frenchmen, who are proverbially unwilling colonists, settled in Quebec, surely it cannot be thought impossible that Milesians and other Greeks should have made their homes in Olbia, which, though in almost the same latitude as Quebec, has a less rigorous climate, (compare the "forests of oak and poplar" with the stunted growth of trees and bushes on the lower St. Lawrence), and could be reached by a coasting voyage, instead of by a journey across the open Atlantic. Must not allowance be made for the adventurous element in the character of the Greek, which made the unlikeness of the new lands to his distant home only an additional attraction? Doubtless the typical Athenian would not have stayed contentedly in

² *Gr. Gesch.* i. 194, 5.

³ iv. 28.

⁴ iv. 53.

⁵ *Travels of Madame de Hell*, p. 56, quoted by Rawlinson, on Herod. iv. 53.

Olbia, any more than the typical Parisian in Quebec, but we cannot predicate Athenian tastes of all Greeks. Beloch's further statement of the backwardness of the cities on the north coast of the Euxine in art and literature may also be found to require modification. Herodotus'⁶ description of the palace of Scyles at Olbia, surrounded by sphinxes and griffins in white marble, certainly does not suggest an indifference to the art of sculpture; and the discovery among the ruins of Olbia of a base which may possibly have belonged to a statue by Praxiteles⁷ points in the same direction. Reference may also be made to Xenophon's mention of the books carried to the north coast of the Euxine in Greek ships;⁸ though, perhaps, if the artistic status of the whole district is called in question, it may be sufficient to refer to the discoveries made in the tombs at Kertsch, on the site of the ancient Pantikapaeum; and to the extraordinarily beautiful series of coins issued by that city.

This may suffice to show that Olbia was a Greek city with characteristics distinct enough to entitle it to be the subject of investigation in many lines of research; the present discussion will be confined to its cults, to the consideration of which we will now proceed.

The materials at hand for a study of the cults of Olbia may be classed under four heads:—(1) inscriptions, (2) coins, (3) works of art, etc., which have been dug up near the site of the ancient Olbia or in the district, (4) references in literature. All these materials, however, while comparatively speaking abundant for the later period of the city's history—the period after its destruction by the Getae, circa 65–60 B.C., and its subsequent rebuilding—are extremely scanty for the earlier times, when a knowledge of the cults would be of such value in the study of Greek religion in general, and of its aspect in the various colonies in particular.

The first question to be discussed is the relation if any, between the religion of the first settlers at Olbia and that of their Scythian neighbours. Did they from the beginning adapt the deities and legends of Sarmatia to the needs of Greek civic worship, or did they set out from Miletus under the special auspices of Apollo, and derive their religion mainly from that of the mother city, while, with the eclecticism inherent in Greek religion, they domesticated in their own town the gods of states with which they had frequent intercourse? Any attempt at the solution of this problem must rely upon a detailed examination of the separate cults, so far as any record of them has come down to us; but one of the cults is so important to this enquiry that a determination of its origin must be attempted even at this preliminary stage.

The cult of Achilles Pontarches was ancient and widespread over the whole district of the North Euxine. The island of Leuke was the special

⁶ Herod. iv. 79.

⁷ Latyshev, *Inscr. Antiq. Orae Septentr. Pont. Eur.* i. 145. Loewy, *Inscr. Gr. Bildhauer*, 76^a. P. 383, quotes this inscription from Latyshev, and approves the identification. He notes that Pliny (*N.H.* xxxvi. 22), mentions

an Eros of Praxiteles at Parion in the Propontis. The letters of this inscription are of the fourth century B.C. Cp. Lat. iv. 82, a marble basis from Chersonesus, inscribed Πολυκράτης ἐποίησε, with Latyshev's note.

⁸ Xenophon, *Anab.* vii. 5, 14.

sanctuary of this worship, but at Olbia also Achilles held a most important place. We have a witness to the existence of this cult on the Euxine as early as the end of the seventh or the beginning of the sixth century B.C. in Alcaeus⁹:—'Αχιλλεὺς ὁ γὰρ Σκυθίκας μέδεις. His worship at Leuke was familiar to Pindar,—

ἐν δ' Εὐξείνῳ πελάγει φαεννὰν Ἀχιλεὺς
νᾶσον (ἔχει).¹⁰

What was the origin of this early localisation of Achilles on the Black Sea?

Koehler¹¹ thinks that the early Milesian settlers found the cult of Achilles already firmly established among the natives of the land where they settled, and that they adopted it from them. It is difficult to see what can be adduced in support of this theory, and a good many points may be advanced in opposition.

In the first place Herodotus¹² says that the only gods worshipped by the Scythians are Hestia first of all, then Zeus and the Earth, then Apollo and Aphrodite Ourania, and Herakles and Ares.

Surely Herodotus would not have omitted to mention Achilles, if he had been a prominent object of worship, especially as he does mention Herakles. The fact that he does not speak of a cult of Achilles at Olbia is not of course germane to the argument; he makes no attempt (unluckily for us) to describe the Greek colonies on the Euxine, which he could assume were familiar to his public; but he gives a very full description of Scythian manners and customs, and one which is generally accepted as being correct in essentials. We owe the charming little picture he has given us of Olbia¹³ to its connection with the fate of the Scythian king Scyles, and the references to its cults, though very valuable as far as they go, are merely incidental.

In the second place, is it reasonable to credit the Scythians and other barbarian tribes on the North shores of the Euxine with an intimate acquaintance with the exploits of Achilles, or with a desire to erect him into a deity? Such a theory seems entirely out of harmony with all we know of the character and religion of these nations. Even if we suppose the Scythians to have deified a native hero of their own, whom the Greeks identified with Achilles, (a theory which is not very tenable, for the history of Achilles was peculiarly distinctive), we should not have advanced far in support of Koehler's theory, for why should the Greeks have forthwith adopted the cult unless Achilles and the Black Sea had been already closely associated in their minds? We must remember that we have not here to deal with an almost immediate amalgamation of the Greek settlers with the natives, such as took place in Magna Graecia; we see from Herodotus' account, nearly 150 years after the founding of Olbia, how alien the customs of the Scythians

⁹ Bergk, *Lyrici Gr.* 48. B, quoted by 1827. (*Mémoires de l'Acad. Imp. des Sciences*,
Eustath. *ad Dionys. Per.* 306. Sér. v. vol. x.)

¹⁰ *Nem.* iv. 49.

¹² iv. 59.

¹¹ *Mémoires sur les îles et la course consacrées
à Achille dans le Pont Euxin.* St. Pétersbourg,

¹³ iv. 78, 79.

were felt to be by the Greeks. Another indication of race-feeling is supplied by the vase-paintings found on the north Euxine.¹⁴ Here Scyths (if we are to call them by this name) of purely Russian type occur, taming horses, or in company with the griffins with which Greek fancy peopled the steppes to the north. The conjunction of these with the purely Greek figures in the mythological scenes on these vases seems to indicate a complete race-separation. The fact that Herodotus mentions that Scyles married a Greek wife at Olbia tends to confirm this view; for if intermarriage had been very common, it would hardly have been worth while to refer to it.

As far as we can tell, Arctinus, the Milesian poet, in his epic the 'Aethiopis,' was the earliest Greek author to place the home of Achilles after death on the island of Leuke. Now Arctinus is usually assigned to the eighth century B.C., which is earlier than the accepted dates for the founding of the Milesian colonies on the Black Sea. Accepting for the moment both these dates, we may none the less conjecture that by the end of the eighth century B.C. Milesian adventurers were already making trial of the Euxine, where the almost complete absence of islands would render Leuke a grateful memory to the Greek sailor, and a prominent feature in his sea-stories. Here was material ready to Arctinus' hand, just as the 'still-vexed Bermoothes' of some sailor's yarn furnished a stage-setting for Shakespeare more than 2,400 years later. But it is not even necessary to suppose as much as this: if Milesians were already beginning to make voyages eastward, a Milesian poet would be very likely to set the abode of Achilles in the dimly-known Euxine. The Isles of the Blest and Elysium were already interchangeable terms;¹⁵ and it was not unnatural for a patriotic poet, to whom it may have been already clear that the expansion of his native state was to take place eastward, to place a Blessed Isle in the eastern sea, and thus put the colonisation of his city under the protection of a tutelary deity. The name *Λευκή* rather suggests the fairy tale; later travellers have explained it by the flocks of sea-birds on its shores; but this scarcely seems enough to warrant the name; whereas if the island Leuke already existed in story, an identification with the island off the mouth of the Ister was almost inevitable, as there are practically no others in the Black Sea.

It is not, however, certain that the date of Arctinus is as early as the eighth century B.C. If his date can be set later, the eastward trend of his story is easy of explanation. Holm¹⁶ assigns the founding of Sinope to the eighth century, apparently following the statement of Eusebius that Trapezus, a colony of Sinope, was founded in Olymp. 6, 1. (756 B.C.). This date Beloch¹⁷ considers too early; he gives 630 B.C. as the date of the founding of Sinope. In any case the beginnings of Milesian adventure in the Euxine may be almost certainly assigned to the lifetime of Arctinus. Mr. D. B.

¹⁴ Stephani, *Compte-Rendu* (passim); *Antiq. du Bosp. Cimm.*, Pl. 45, 46 (vase of Xenophantos).

¹⁵ Pauly-Wissowa, *Real-Encycl.* i., p. 240.

¹⁶ *Greek Hist.* (Engl. transl.), i. chap. xxi.

p. 275.

¹⁷ *Gr. Gesch.* i. chap. vi. p. 193, note 2; Busolt, *Gr. Gesch.* ii.², p. 482; Strabo, xii. 546.

Mouro¹⁸ regards the fact that a Milesian poet is the first to make Leuke the abode of Achilles as significant of the important part played by Miletus in diffusing Greek religious ideas through the Black Sea region. The choice of Leuke serves to 'connect the "Aethiopsis" with the time when the Ionian trading cities, of which Miletus was the chief, had begun to adopt the new religious practices that grew up, after the Homeric age, in honour of the national heroes.' Welcker¹⁹ takes a similar view and quotes Bernhardt (ii. 153): 'The apotheosis of the hero at Leuke betrays the Milesian poet.'

It is worth while to notice here the significance of the companion assigned to Achilles at Leuke, variously named as Medea, Iphigeneia, and Helen. The last²⁰ is apparently the latest in date of the tales, and has no importance here; it must have arisen in an age that had begun to criticise the Homeric stories, and to feel that the noblest of heroes and the fairest of women must be united after death, even though they had been separated in life. The oldest story seems to be that in which Medea becomes the wife of Achilles, according to the scholiast on Apollonius Rhodius, *Arg.* iv. 814 ὅτι δὲ Ἀχιλλεύς εἰς τὸ Ἡλύσιον πεδῖον παραγενόμενος ἔγημε Μήδειαν πρῶτος Ἰβυκος εἶρηκε μεθ' ὃν Σιμωνίδης. Ibycus is usually placed about 560 B.C. It must be noted that Elysium and not Leuke is here made the hero's abode, so that unless we may suppose that Achilles' part of Elysium was already localised at Leuke, we cannot press the argument too far; but it is tempting to conjecture that Achilles and Medea were placed side by side as the two semi-divine personages most closely connected with the Euxine. Colonisation in the Euxine had by this time been in progress for almost a hundred years, and Achilles was already its tutelary deity. The country of Medea and the Golden Fleece was supposed to lie to the far East, so, as the Black Sea was gradually opened up, the Argonautic myths inevitably attached themselves to its shores, for no other sea lay in this direction.²¹ The story of the voyage of the Argo was already familiar to the author of the *Odyssey*—

οἷη δὲ κείνη γε παρέπλω ποντοπόρος νηὺς
'Αργὼ πᾶσι μέλουσα, παρ' Αἰήταο πλέουσα,²²

but here the direction is westward, if east and west can be said to exist in fairy-land.

It is more difficult to assign a date to the story of Achilles' connection at Leuke with Iphigeneia—the most satisfactory bride for him from the modern point of view. The tale was elaborated by Lycophron, but so late an author has little value in the present enquiry. The 'Kypria' (776 B.C. circa) seems to be the source of the story that Artemis carried away Iphigeneia to the Tauri, leaving a hind to be sacrificed at Aulis in her stead (Proclus, *περὶ τῶν Κυπρίων*, p. 475, *ap.* Gaisford, *Hephaest.* Ἄρτεμις δὲ αὐτὴν ἔξαρπάσασα εἰς Ταύρους μετακομίζει καὶ ἀθάνατον ποιεῖ· ἔλαφον δὲ ἀντὶ τῆς κόρης παρίστησι τῷ βωμῷ). The story of the substitution was, however, either

¹⁸ *Journal of Hellenic Studies* (1884), vol. 5, p. 16.

¹⁹ *Der Ep. Cycclus*, ii. p. 221.

²⁰ Pausan., iii. 19, 11.

²¹ See Holm, i. p. 117.

²² *Odyssey*, xii. 69, 70.

unknown to or ignored by Aeschylus,²³ Sophocles,²⁴ and Pindar²⁵; perhaps it was considered as an unauthorized version of the myth, to which Euripides, perceiving its dramatic value, first gave wide currency.²⁶ But we have no proof that the story of Iphigeneia's marriage to Achilles after death, and their abode at Leuke, was known to Euripides, unless the words of Achilles to Iphigeneia—

Ἀγαμέμνωνος παῖ, μακάριόν μέ τις θεῶν
ἔμελλε θήσειν, εἰ τύχοιμι σῶν γάμων²⁷—

are to be regarded as an instance of dramatic irony, the final fulfilment of his wish being known to all the spectators. This interpretation is probably far-fetched, but the connection between the two is such a natural one that it is difficult not to suppose that it was already familiar at this date.²⁸

The cult of Achilles at Olbia will have to be discussed later, with such details as the materials at hand allow; the object of the preceding pages is to make it seem probable that the mythical connection of Achilles with the Euxine was purely Greek in its origin, and may even be traced with considerable probability to Miletus, and to the earliest period of Milesian enterprise in the Black Sea, and that it owed nothing to the barbarian dwellers along the sea-shore.

The same theory as to the independence of the religion of Olbia of ideas borrowed from the Scythians seems to be borne out by Herodotus.²⁹ He says that the Scythians had no shrines or images of their gods except of Ares. Moreover, as the 'temple' of Ares was merely of brushwood and his 'image' (τὸ ἄγαλμα) an ancient sword, it seems scarcely necessary to make even this exception. It is hardly conceivable that a religion of this stamp could have had appreciable influence on the cults of pure Greeks, such as the early settlers at Olbia.

It is perhaps already clear that an attempt will be made to present Olbia as a purely Greek city, very little influenced by the barbarous inhabitants of the land, and deriving such foreign elements as appear in its worship rather from its commerce with Asiatic cities than from its neighbours on the European mainland. There are two passages, however, which must be taken into account here,—Herodotus' reference (iv. 17) to the Ἕλληνες Σκύθαι, whom he places in the district just inland from Olbia; and the mention in the Protogenes decree³⁰ of the Μιξέλληνες, who to the number of 1500 had deserted to the enemy. With regard to the former, it seems best to suppose with Stein (*ad loc.*) that they were Scythians who had adopted Greek customs from their trade with the Greek commercial city. Note that Herodotus distinctly places them *outside* the town, and at a distance from it, and that he makes no mention of any mixed element within the city itself. Ditten-

²³ *Agam.* 1390.

²⁴ *Electra*, 531, 2.

²⁵ *Pyth.* xi. 22.

²⁶ Assuming that the latter part of *Iph. in Aul.* is from Euripides' hand.

²⁷ *Iph. in Aul.*, 1405, 6.

²⁸ See Wilamowitz, *Hermes*, xviii. (1883), 250.

²⁹ Herod. iv. 59-62, alluded to above.

³⁰ Latyschev, i. 16, B.

berger³¹ in his note on the *Μιξέλληνες* of the Protogenes decree, considers that both in this place and in Herodotus a mixed race is meant. Certainly the *Μιξέλληνες* must be regarded as such (the name would hardly be possible otherwise) but the date of the Protogenes decree is probably at least 200 years later than Herodotus' visit to Olbia, and the city was already rapidly declining. But even in the decree they are described as *τοὺς τὴν παρώρειαν οἰκοῦντας*, and nothing leads us to suppose that they were found inside the city, or that they had any share in its government. The names found in the inscriptions are purely Greek, up to the time of the destruction of the city by the Getae. It is interesting here to notice that Dio Chrysostom,³² after describing the miserable state of the Greeks after the destruction of their cities by the Getae, ascribes the rebuilding of Olbia by its former citizens to the invitation of the Scythians, who felt the loss of a market for their products. After the taking of the city, merchants no longer came to Olbia, *ἄτε οὐκ ἔχοντες ὁμοφώνους τοὺς ὑποδεχομένους οὐδὲ αὐτῶν Σκυθῶν ἀξιούντων οὐδὲ ἐπισταμένων ἐμπόριον αὐτῶν κατασκευάσθαι τὸν Ἑλληνικὸν τρόπον*. This at least shows that the Greek language and Greek customs had not diffused themselves over the surrounding peoples, and indirectly supports the converse proposition that the Greeks of Olbia were little influenced by their Scythian neighbours. The relation between the Greeks and the barbarians may be plausibly conjectured to have been not unlike that of the English to the natives in the early days of the settlements in India, before they had any real territorial jurisdiction, and were still in some degree subject to the neighbouring native prince. The Scythian husbandmen, *οἱ οὐκ ἐπὶ σιτήσι σπείρουσι τὸν σῖτον ἀλλ' ἐπὶ πρήσι*,³³ brought their grain for sale to Olbia, just as the Hindoo peasant brought his rice or indigo to the factories of the East India Company. So it is as the most northerly outpost of Greek civilization and religion that Olbia will be considered in the present essay.

Apollo.

‘Ex diis insignis Apollo *προστάτης*.’—Boeckh, *C.I.G.* ii. p. 87.

From this statement of Boeckh's, which seems justified by the evidence that has come down to us, Apollo would claim the first place in a consideration of the cults of Olbia. It is true that the series of dedicatory inscriptions to Apollo Prostates, given by Latyshev (i. 50–74, iv. 15, 16), belongs to the later period of the city (none is earlier than the second or third centuries A.D.), but there are two other inscriptions to Apollo of a much earlier period.³⁴ One (Lat. i. 93) is assigned to the fourth century B.C.; it is fragmentary

ΚΗΙΟΞΟ/
ΤΟΛΛΩΝΗ

³¹ *Sylloge*,² 226.

³² *Orat.* xxxvi.

³³ Herod. iv. 17.

³⁴ Also the fragmentary one given by Lat. i.

19, and assigned by him to the second century B.C., which seems to contain the name of Apollo.

Latyschev fills it out as

... κήϊος Ὀ[λβιοπολίτης] (?)
Ἀπ[όλλωνι] Ἰ[ητρώϊ] ?]

There seems no doubt here as to the occurrence of the name Apollo; whether Ἰητρός is the title to be supplied is of course a matter for conjecture, but it occurs in Panticapaeian inscriptions of the fourth century B.C., and in a Phanagorian one of the third century B.C.³⁵

The other early Olbian inscription referring to Apollo is the dedication to Apollo Delphinios (Lat. i. 106) assigned to the third century B.C.

The evidence of coins indicates clearly the importance of the cult of Apollo at Olbia; from the fourth century B.C. down we have examples of coins bearing his head, probably more in number than those of any other single deity. The Berlin collection, for example, which contains 146 Olbian coins, has over thirty which show representations of Apollo. The origin of the special cult of Apollo at Olbia may be traced back to Miletus, where Apollo was the chief deity, and the natural patron of the numerous colonies sent out; and its persistence at Olbia may have been due to Apollo's connection with the myth of the Hyperboreans, and to the feeling that he was a fitting tutelary deity for the most northerly Greek colony. Both of these points, the derivation of the cult from Miletus, and the relation of Apollo to the North, will be discussed below, in the more detailed examination of the worship of Apollo at Olbia under its different aspects.

The want of early evidence for the cult of Apollo Prostates at Olbia makes the testimony of some Olbian coins of the first century A.D. of the highest value. When in these Olbian Imperial coins we find a type of Apollo which seems clearly that of an archaic statue, we are justified in treating it as at least presumptive evidence of the existence of an early cult. One of these coins is described in the Catalogue of the Berlin Museum,³⁶—

Obverse.

ΟΛΒΙΟΠΟ Youthful head,
right, probably Apollo.
Æ 5.

Reverse.

ΚΑΤΥΔ Naked Apollo stand-
ing facing, seemingly with modius or
walled-crown, vase in right, large bow
with arrow in left.



FIG. 2.—BRONZE COIN OF OLBIA IN THE BERLIN MUSEUM.

See Fig. 2. A similar coin from the Moscow collection is given by B. Pick³⁷ the reverse of which is described as follows:—

³⁵ Lat. ii. 6, 10, 15, 348.

³⁶ *Beschreibung der Antiken Münzen*, Berlin 1888, vol. 1, No. 124 in the series of coins

of Olbia.

³⁷ *Thrakische Münzbilder*, *Jahrbuch d. Deutschen Arch. Instit.*, xiii. (1898), Pl. x. 31.

ΔΑΔΟCCATY. Naked Apollo with calathus standing facing, in his outstretched right a round-shaped object, in the left bow and arrow.

The first point of extraordinary interest about these two coins is the presence of the calathus³⁸ on the head of the god, making it clear that he is here depicted in his character as civic deity. The die-cutter was not in the least likely to have added this unusual attribute, unless he was copying from a well-known statue, of which the calathus was one of the distinguishing marks, without which the type on the coin would not be recognized as a reproduction of the statue. The presence of the calathus Pick thinks alone sufficient to indicate the great antiquity of the original; but, more than this, he regards the figure on the coins as clearly archaic, and thinks it resembles very closely the archaic statuette of Apollo from Naxos³⁹; but he considers it older than the statuette because of the presence of the calathus. He would assign the date of the statue to the beginning, or at any rate the middle, of the sixth century B.C. *i.e.* within the first century of the city's existence; and in any case regards it as certainly earlier than the Didymaeon Apollo of Canachus in the mother-city Miletus. The round object in the right hand Pick explains as perhaps a pomegranate or an ointment-box,—the same attribute which appears in the Naxos statuette; and as a bow appears on the coins in the left hand, he thinks one should also be placed in the left hand of the statuette, especially as the inscription upon it has the epithet *ἐκηβόλος*. The fact that earlier Olbian coins show merely a head of Apollo has of course no bearing on the question of the antiquity of the statue depicted on these Imperial coins, as in the period of best art the die-cutters never merely imitated a statue in their coin-types.⁴⁰

It should be said that Pick only suggests the possibility of identifying this coin-type with Apollo *Προστάτης*; but, granting his premisses as to the archaic character of the original of the coin-type, the identification seems almost inevitable. There is certainly a difficulty in accounting for the preservation of the statue in the destruction of Olbia by the Getae; but we do not know how complete this destruction was; moreover, if there were really a cult-statue of Apollo *Προστάτης* it would certainly have been reproduced by numerous statuettes. These, of course, might easily have escaped, and any one of them could have furnished a type for the die-cutter,—the calathus being almost sufficient of itself to point the reference to the statue.

The series of dedicatory inscriptions to Apollo Prostates given by Latyshev,⁴¹ is assigned by him to the second and third centuries A.D., *i.e.* somewhat later than the date assigned by Pick to the coins discussed above. These offerings were all made by the *στρατηγοί* (=praetors) and from the number of inscriptions that remain it has been supposed that the gifts were

³⁸ Through the courtesy of Dr. H. Dressel of the Berlin Museum, I have obtained casts of coin 124 (as well as of others referred to below). From the cast it appears even more clearly than from the illustration given by Pick, that the

head-dress is undoubtedly the calathus.

³⁹ See Roscher's *Lexicon*, i.¹ 452.

⁴⁰ P. Gardner, *Types of Greek Coins*, p. 68, *et seq.*

⁴¹ Lat. i. 50-74, iv. 15, 16.

made yearly. The last lines of No. 50 may be quoted to illustrate the usual formula with which they conclude :—

ἀνέθηκαν φιέλῃν ἀργυρᾶν ὑπὲρ τῆς πόλεως εὐσταθείας καὶ τῆς ἑαυτῶν
ὕγείας.

Other articles presented are a golden necklace, a silver Nike, a golden Nike on a silver base, &c. In No. 58 instead of the usual gifts, the praetors repaired the roof and wall of the temple of Apollo :

ἐπεσκεύασαν τοῦ Ἀπόλλωνος ν[α]οῦ τὴν τε ὀροφήν [κ]αὶ [κ]ύκλωθεν τὰ
ἐνλεί[π]οντα [κ]αινίσαντες ὑπὲρ τῆς πόλεως [κ]αὶ τῆς ἑαυτῶν ὑγεί[α]ς.

Below this last inscription is an epigram addressing Apollo as τοξότα Φοῖβε, apparently commemorating some victory. No. 61 similarly refers to the repairing of the temple :—

ἀνέθηκαν Νείκην χρύ(σ)εον ὑπὲρ τῆς πόλεως καὶ τῇ[ς] ἑαυτῶν ὑγεία[ς].
Ἐπὶ τοῖς αὐτοῖς ἐπεσκευάσ[θησαν] αἱ στοαὶ τοῦ ναοῦ ἐ[κ] τοῦ δη[μ]οσίου
πόρου.⁴²

These inscriptions make it impossible to doubt that Apollo Προστάτης was the city-deity of Olbia in the later period; and from the permanence of Greek state-cults, as well as from the evidence of the coins given above, it seems reasonable to believe that the earliest colonists brought with them from Miletus this cult, of special appropriateness for those who were going to found a city in a new land. For the title Προστάτης is of kindred meaning to that of Ἀγνιεύς, given to Apollo as the protector of those who went in and out of the house. In this aspect Apollo was represented by a conical block of stone standing before the door.⁴³ (On a coin given in figure 3,⁴⁴ referred to below, Apollo appears with his left elbow resting upon a pillar). Is it too much to conjecture that the early colonists of Olbia brought with them a small column of this kind as their representation of Apollo, which served as the cult image until the production of the statue postulated by Pick as the original of the standing figure in the coin-type? ⁴⁵ Hesychius, under προστάτης, explains the word by the custom of placing a statue (or pillar) of Apollo before the house door, ὅτι πρὸ τῶν θυρῶν ἴδρυται. Whether this derivation will stand or not, there can be no

⁴² It may be noted here that it is from the last two words of this inscription that the title, otherwise unknown, of Apollo Ithyporos has been evolved. Boeckh *C.I.G.* 2072, reads the last eight letters of the inscription as ΙΘΥΠΟΡΟΥ. Latyshev, in his comments on this inscription, points out that the dedication is to Apollo Προστάτης, and adds, 'Jam igitur valere jubeamus necesse est Apollinem illum Ithyporum, qui Koehlero duce in omnes libros et commentationes de Olbia scriptas irrepsit.'

⁴³ For references to stones or representations

of deities, see Frazer's note on Paus. x. 16, 3; and for Apollo in particular, Aristoph. *Wasps*. 875. These representations not infrequently occur on coins, e.g. coin of Ambrakia: Head, *Hist. Num.*, p. 270, fig. 181; and coin of Megara, Imhoof-Blumer and Gardner, *Num. Comm. on Paus.*, *J.H.S.*, vi. (1885) p. 55. Also Evans, *Myc. Tree and Pillar Cult*, *J.H.S.* xxi. (1901) i. p. 173, fig. 49.

⁴⁴ No. 135 in Berlin Catalogue.

⁴⁵ See Prof. P. Gardner, *Countries and Cities in Anc. Art*, *J.H.S.* ix. (1888) p. 51.

doubt that the titles of Ἀγνιεύς and Προστάτης present the god under substantially the same aspect. Compare the Delphic oracle quoted by Demosthenes⁴⁶ περὶ ὑγείας θύειν καὶ εὐχεσθαι Διὶ ὑστάτῳ, Ἡρακλεῖ, Ἀπόλλωνι προστατηρίῳ· περὶ τύχας ἀγαθὰς Ἀπόλλωνι ἀγνιεύϊ, Λατοῖ, Ἀρτέμιδι, καὶ κατ' ἀγνιᾶς κρατήρας ἰσάμεν,⁴⁷ and again in the oracle from Dodona quoted in the same passage occur the words Ἀπόλλωνι ἀποτροπαίῳ βούν θῦσαι. It is worth while to notice the correspondence between περὶ ὑγείας in the oracle and ὑπὲρ τῆς ἑαυτῶν ὑγείας in the dedicatory inscriptions of the praetors to Apollo Prostafes, quoted above.

The actual title of Prostafes occurs in Soph. *Trach.* 209 :—

ἐν δὲ
κοινὸς ἀρσένων ἵτω
κλαγγὰ τὸν εὐφάρετταν
Ἀπόλλω προστατάν.

In the *Electra*, l. 637 Clytemnestra invokes Apollo as Φοῖβε Προστατήριε, a name given also to Artemis in Aesch. *Septem.* 449 προστατηρίας Ἀρτέμιδος εὐνοίαισι. Paus. i. 44, 2 mentions a temple of Apollo under this title at Megara (cp. the name Προστάσια applied to Demeter, Paus. ii. 11. 3). At Athens offerings were made to Apollo Προστατήριος and Artemis βουλαία before the meeting of the ecclesia.⁴⁸ Notice also the reference to Artemis in an inscription from Chersonesus,⁴⁹ ἡ διὰ παντὸς Χερσονασιτῶν προστατοῦσα Παρθένος. Preller-Robert⁵⁰ may be quoted here: 'nicht selten ist Apollon Agyieus aber auch ein Symbol der städtischen Ansiedlung.' Such we may conjecture Apollo Prostafes to have been at Olbia; and we may accept the crude representation of the god wearing the calathus upon the Imperial coin as the only representation of him as the tutelary deity of Olbia that has come down to us. The fragmentary early inscription which may be to Apollo Ἰητρος has been already quoted. It cannot be pressed as evidence that this cult actually existed at Olbia, but it is likely enough that it did, for we have inscriptions from Panticapaeum and Phanagoria (referred to above), where Apollo is given this title.⁵¹ The name Apollo Ἰατρος occurs on two coins, one described by von Sallet⁵² and another by Lambros,⁵³ given by Pick.⁵⁴ These have been assigned to Asia Minor, but Pick thinks they belong to Apollonia on the Black Sea, together with some other coins which he gives,⁵⁵ and this attribution is now accepted by all numismatists. Von Sallet's coin has a laureate head of Apollo as obverse type. The reverse is thus described :—

⁴⁶ *Meil.* 531.

⁴⁷ An Attic monument quoted by Welcker (*Gr. Gotterlehre*, vol. i. p. 496), links these titles, *C.I.G.*, 465.

⁴⁸ *C.I.A.* ii. 390, 392, 408, 417, 431, 432, 459.

⁴⁹ *Lat.* i. 185.

⁵⁰ *Gr. Myth.* i. 1 p. 276, 87.

⁵¹ See Wernicke's article, Pauly-Wissowa, *Real-Encycl.* i. p. 54.

⁵² *Zeitschr. f. Num.* 5, 108.

⁵³ *Bull. Corr. Hell.* 2, 508, 2.

⁵⁴ *Jahrbuch*, loc. cit. Pl. x. 29, 30.

⁵⁵ loc. cit. Pl. x. 26-28.

'Naked Apollo standing facing and looking left, right leaning on a long branch, in lowered left a bow and arrow.'

The coin given by Lambros is similar, but with full inscription. Pick says that the material of these two coins is like that of the coins of Mesembria, near Apollonia. The other three coins with which he compares these two, and which he thinks certainly belong to Apollonia, all have an anchor as the obverse type, and a standing figure of Apollo as the reverse.

One of these may be quoted, which Pick dates in the first half of the second century B.C. On the obverse is an anchor. The reverse is described as follows :

Naked Apollo, standing facing, a bough in his outstretched right, in his lowered left a bow and two arrows, right perhaps leaning on pillar.

Now we know that when Lucullus sacked Apollonia in 72 B.C. he took away a colossal statue of Apollo, the work of Calamis, and placed it at Rome.⁵⁶ No coins of Apollonia with this Apollo-type are certainly known, though on Imperial coins a temple often appears, with a standing naked Apollo as cult-statue inside. As the three anchor coins belong to the first half of the second century B.C. and as the archaic Apollo-type could not belong to that period, Pick thinks that the figure represented may very likely be that of the colossal statue by Calamis. The existence of a cult of Apollo Ἰητρος at Apollonia has been recently proved by an inscription of the early Roman period,⁵⁷ κτίσας τὴν πόλιν μετὰ τὴν ἔκτωσην Ἀπόλλωνι Ἰητρ[φ]. The laurel bough is regarded as the attribute of Apollo under this aspect; this cannot certainly be proved; however, it occurs in all five of the coins mentioned above; and at Panticapaeum, though no full length figure of the god occurs on coins, a relief has been found in which Apollo has a long laurel branch.⁵⁸ This relief is assigned by Reinach to the period of Calamis; it is of importance here because the name Ἰητρος occurs oftener at Panticapaeum than anywhere else. To return to Olbia: No. 135 in the Berlin catalogue has the following obverse type:—

Standing Apollo facing, looking left, in right hand bough (?), left resting on pillar.

The reverse type is a lyre. The coin was referred to above (p. 255), and is shown in Fig. 3. This, or a very similar coin, is given by Pick.⁵⁹ That the object in the right hand is a bough seems pretty certain, from the way it is held; the pillar would seem to be the attribute of Apollo Prostates, or Agyieus; such a blending of attributes is not uncommon.

⁵⁶ Strabo, 7, 6, 1; Pliny, *N.H.* 34, 39; tome 2, 57-79, Pl. vii.
Appian, *Illyr.* 30.

⁵⁷ Dumont, *Mémoires de l'Académie des Inscriptions*, p. 459, n. 111, d 7. i. 1, Pl. xi. 20.

⁵⁸ *Monuments et Mémoires*, Fond. Piot.

Certainly it is impossible to state positively that a cult of Apollo Ἰηπρός existed at Olbia, from the dubious evidence of a coin and a fragmentary



FIG. 3.—BRONZE COIN OF OLBIA IN THE BERLIN MUSEUM.

inscription, but doubtful as they are, one may fairly make the most of them, considering the prevalence of the cult on the north shores of the Black Sea.

The name of Apollo Delphinios occurs in an inscription given by Latyshev I, 106, and assigned by him to the third century, B.C. :

Ἀγρότας καὶ Ποσίδεος οἱ ἀδελφοὶ τὸν πατέρα Διονύσιον [Ἀπ]όλλωνι Δελφινίῳ ἱερησάμενον.

This is all the definite evidence that exists as to the cult of Apollo Delphinios at Olbia. A fish-type (the identification of which is discussed below under Demeter), occurs very commonly on Olbian coins as a reverse type, but frequently with deities other than Apollo on the obverse; and as it has usually an eagle standing upon it and pecking at it, it seems scarcely possible to take it as a symbol of Apollo Delphinios. However, it appears by itself on some coins,⁶⁰ also in coin No. 73 of the Berlin collection, with Apollo as the obverse type, and it may possibly have been the attribute of the god under this aspect, though a commercial explanation seems more probable. The cult was widespread. Strabo (iv. 179) in speaking of the cult of Apollo Delphinios at Massilia, says: *τοῦτο μὲν κοινὸν Ἰώνων ἀπάντων*, and Plutarch *de sollertia anim.* 984 A, says: *καὶ μὲν Ἀρτέμιδος γε Δικτύννης Δελφινίου τε Ἀπόλλωνος ἱερὰ καὶ βωμοὶ παρὰ πολλοῖς Ἑλλήνων εἰσίν*. The name appears in several inscriptions; two may be mentioned here, both belonging to the third century B.C. like the Olbian one, and both from Knossos in Crete, *C.I.G.*, 2554, and Cauer, *Del.* 121. A month Delphinios, probably corresponding to the Attic Anthesterion, is known at Aegina, Crete, and Thera.⁶¹

As Delphinios, Apollo was the god who gave fair weather to the mariner, and was therefore likely to be a special object of worship at Olbia, whose wealth and prosperity depended on maritime trade. The title may be compared with that of Ἐπιβατήριος, under which name Apollo had a temple at Troezen⁶² and Ἐμβάσιος, to whom the Argonauts set up an altar, according to Apoll. Rhod. i. 402.

For the existence at Olbia of representations of the griffin, a creature specially attached to the cult of Apollo, we have evidence much earlier than

⁶⁰ Pick, *loc. cit.*, Pl. ix. 17, 18

⁶² Paus., ii. 32. 2

⁶¹ Scholiast on Pindar, *Nem.* v. 81.

any of the coins or inscriptions cited above, namely, from Herodotus himself, who, in describing the palace of Scyles at Olbia (iv. 79) says: *τὴν πέριξ λευκοῦ λίθου σφίγγες τε καὶ γρύπες ἕστασαν*. Griffins occur constantly in vase-paintings found in the North Euxine district; the most famous of these is the well-known vase of Xenophantos already referred to, where the bodies of the griffins are blue and the horns and part of the wings gilded. This was found near Panticapaeum in 1836.⁶³ The griffins on the coins of Panticapaeum are of course familiar. Mr. A. J. Evans⁶⁴ traces back the connection of griffins and the sun-god to the Egyptian solar cycle. He gives Mycenaean gems and cylinders upon which a pair of griffins appear as heraldic supporters of the sacred column—the divine pyramidal stone which, as we have seen, persists as an emblem of Apollo in his character of Agyieus down to a late date.

Hesiod was the first to treat of griffins, according to the scholiast on Aesch. Prom. 803 (*οἱ γρύπες*) *περὶ ὧν Ἡσίοδος πρῶτος ἑτερατεύσατο*, but we do not know in what poem. As he also wrote about the Hyperboreans, it is possible that even as early as this griffins were supposed to live in the north. We know more of the poem of Aristeas of Proconnesus (early sixth century B.C. ?) from Herodotus iv. 13–15, a passage of great importance in this connection. Herodotus speaks of the poem as *τὰ ἔπεα ταῦτα τὰ νῦν ὑπ' Ἑλλήνων Ἀριμάσπεια καλεῖται*. According to Suidas the Arimaspeia was a hexameter poem in three books. Dürrbach⁶⁵ says that the Arimaspians apparently belonged to a Scythian myth, and Aristeas seems to have had the idea of identifying the griffins already known in Greece, with the fabulous animals from whom in the story the Arimaspians stole the gold. But if we follow Mr. Evans in tracing back the connection of the griffin and the sun-god to the very earliest times, we must surely explain the localisation of the griffins in the North Euxine district by the myth of Apollo and the Hyperboreans, which will be referred to below. Sun myths are at present discredited, but the immemorial connection of Apollo and the Hyperboreans (*δαμον Ὑπερβορέων . . . Ἀπόλλωνος θεράποντα*⁶⁶) can hardly be explained in any other way. Dim accounts of a land where for a part of the year the sun never set must have reached Hellas at a very early period, and the griffins, familiar as the attendants of Apollo in the representations of the god in art, were localised in the unknown land of marvels. Then came Aristeas, an early Marco Polo, whom we may believe really to have travelled over the countries he described. But the griffins already had their home there, and Aristeas could not have ousted them even if he had wished to forgo such a picturesque feature of his poem. What he apparently did was to tell the story in the form henceforth accepted as the authorized version. (Note, by the way, the connection of Aristeas with Apollo as shown by Herodotus' story of his appearance at Metapontum, and injunction to the inhabitants to set up an altar to Apollo and a statue to himself.) The story

⁶³ *Ant. du Bosp. Cimm.*, Pl. 45, 46.

⁶⁴ *Mye. Tree and Pillar Cult*, J.H.S. 1901, vol. xxi. part. 1.

⁶⁵ Daremberg-Saglio. s.v. Gryphon.

⁶⁶ Pindar, *Olymp.* iii. 17.

of the griffins and Arimaspians has ever since possessed a strange fascination; beside Aeschylus' lines (*Prom.* 803 *et seq.*):—

ὄξυστόμους γὰρ Ζηνὸς ἀκραγεῖς κύνας
Γρύπας φύλαξαι, τὸν τε μουνῶπα στρατὸν
Ἀριμασπὸν ἵπποβάμον', οἷ χρυσόρρντον
οἰκοῦσιν ἀμφὶ νᾶμα Πλούτωνος πόρον·

set Milton (*Pur. Lust*, ii. 948):—

'As when a gryphon through the wilderness
With winged course o'er hill or moory dale
Pursues the Arimaspiā, who *by stealth*⁶⁷
Has from his wakeful custody purloined
The guarded gold.'

The monuments representing these legends of griffins and Arimaspians are not earlier than the fifth century B.C., but, as already seen, griffins had been familiar as a motive in art for many centuries, borrowed from the East. From Attic tetradrachms we know that the temple statue of Apollo at Delphi had a griffin on each side.⁶⁸

Ctesias, who identifies the Griffins with the gold-digging ants of India, mentioned by Herod. iii. 102, gives the most exact description of them,—*γρύπες, ὄρνεα τετράποδα, μέγεθος ὅσον λύκος, σκέλη καὶ ὄνυχες οἰάπερ λέων, τὰ ἐν τῷ ἄλλῳ σώματι πτερὰ μέλανα, ἐρυθρὰ δὲ τὰ ἐν τῷ στήθει*,⁶⁹ and Pausanias⁷⁰ contributes a further touch,—*ἤδη δὲ καὶ ἄλλα ἤκουσα, τοῖς γρυψὶ στίγματα ὅποια καὶ τοῖς παρδάλεσιν εἶναι*.

Sphinxes are found as companions of the griffins from the time of the Mycenaean signets, and they too are undoubtedly of Eastern origin. They were associated with the worship of Dionysus as well as with that of Apollo, and it may have been as creatures of the Bacchic cycle that they appeared round the palace of Scyles at Olbia, as Herodotus tells of his initiation in the Bacchic mysteries, which finally led to his death.

It is hardly possible here to make more than a bare reference to the close connection of Apollo and the Hyperboreans which seems to go back far beyond any period for which we can have anything like historical evidence. It cannot be wholly omitted, however, if there is any basis for the conjecture already made,—that the permanence of the cult of Apollo at Olbia was in part due to a feeling that the god of the north was the fitting deity for the most northerly Greek state,—a feeling which artists did their best to perpetuate; note especially the constant occurrence of the griffin in works of art found in this neighbourhood. There is no doubt that in very early times the Greeks knew something of lands to the far north,—the earliest reference in literature is of course *Odyss.* x. 84–86.

ἐνθα κ' αἴπνος ἀνὴρ δοιοὺς ἐξήρατο μισθούς,
τὸν μὲν βουκολέων, τὸν δ' ἄργυφα μῆλα νομέων·
ἐγγὺς γὰρ νυκτός τε καὶ ἡματος εἰσι κέλευθοι.

⁶⁷ *ὑπέκ.* Herod. iii. 116.

⁶⁸ Furtwangler, *Arch. Zeit.* 1882, p. 332.

⁶⁹ Ctesias, *India*, 12, ed. Bahr.

⁷⁰ viii. 2, 7.

Herodotus' account of the offerings sent by the Hyperboreans to Delos⁷¹ is of the highest interest in this connection, as Delos was from very early times the centre of the Ionian worship of Apollo, and we have here a proof of very ancient intercourse between the North and the Aegean. The route as described by Herodotus should be carefully noticed. Prof. Ridgeway⁷² says: "The only avenue between Greece and upper Europe in early days was that which starting at Dodona led up through Epirus to the head of the Adriatic." So the Black Sea would appear to have been unknown to the Greeks until the period when Miletus began colonising on its shores. May we see in this connection of the "arterial highway," as Professor Ridgeway calls it, with the service of Apollo the origin, or at any rate an early and striking instance, of his function as god of journeys and streets? Notice here also the existence of the city Apollonia on the Adriatic, not far from Dodona, and perhaps a station on the route of the Hyperboreans. Olen was the earliest poet to deal with the subject of the Hyperboreans, as we know from both Herodotus and Pausanias.⁷³ Herodotus says,—*οὗτος δὲ ὁ Ὀλὴν καὶ τοὺς ἄλλους τοὺς παλαιούς ὕμνους ἐποίησε ἐκ Λυκίης ἐλθὼν τοὺς ἀειδομένους ἐν Δῆλῳ*. Here again we have Lycia, another of the early localities connected with the cult of Apollo, brought into close intercourse with Delos and the North. Pausanias⁷⁴ says, quoting a hymn;—*Ὀλὴν θ' ὅς γένητο πρῶτος Φοίβοιο προφάτας*. We may compare him with Aristeas, who seems also to have combined the characters of poet, traveller, and priest of Apollo, and observe again the connection of *travel* with the cult of Apollo—Apollo 'Αρχηγέτης⁷⁵—a feature prominent later in the work of the Delphic oracle in forwarding colonisation.

Alcaeus⁷⁶ speaks of swans bringing the new-born Apollo to the land of the Hyperboreans. Swans were among the creatures attached to the worship of Apollo.⁷⁷ Pindar's reference to the Hyperboreans as the "henchmen of Apollo" has already been quoted, but there is also a reference to the periodical sojourning of the god in the North in *Pylh.* iv. 5.

οὐκ ἀποδάμουν Ἀπόλλωνος τυχόντος.

Later poets need not be quoted; all that is aimed at here is to indicate the likelihood of the cult of Apollo at Olbia growing stronger as the centuries went by, and his ancient connection with the surrounding lands was made constantly more evident alike by literature and art.

⁷¹ iv. 33-35.

⁷² *Early Age of Greece*, i. p. 368.

⁷³ viii. 21, 3.

⁷⁴ x. 5, 7.

⁷⁵ See references in Pauly-Wissowa, *sub* c. ii.¹ p. 44, to cults of Apollo under this title.

⁷⁶ Quoted by Himerius. See Beigk, *P.L.G.* iii. p. 116.

⁷⁷ Compare Cic., *Tusc.* i, 30, 73, quoting from Plato, *Phaedo*. 85 B) 'Itaque commemorat ut cygni, qui non sine causa Apollini dicati sint, sed quod ab eo divinationem habere videntur, qua providentes quid in morte boni sit cum cantu et voluptate moriantur, sic omnibus bonis et doctis esse faciendum.' Also see Preller-Robert, *Gr. Myth.* i¹ p. 213.

Demeter.

Demeter must be placed next in order to Apollo, as she has some claim to be regarded as the special city-goddess. Her head is a frequent type upon the coins, and it seems necessary to identify the Tyche type of this city with Demeter, on account of the ears of barley on the walled crown. For the apparent existence at Olbia of Apollo and Demeter side by side as civic deities, we might compare the position of Athene and Poseidon-Erechtheus at Athens. That Apollo and Demeter did have some such association at Olbia is made probable by the fact that their heads appear upon coins which have similar reverse types. But Apollo would seem to have held the more important position of the two, as his title of Προστάτης would go far to show; it is also significant that while there are many Olbian inscriptions referring to Apollo, not one has yet been found bearing the name of Demeter, and there are only three in the whole North Euxine district, all from Panticapaeum.⁷⁸ Of course, in a place where the remains are as fragmentary as is the case at Olbia, the absence of inscriptions cannot be regarded as conclusive, but still it seems curious that none has been found, if Demeter held a place of such importance. Against the absence of the inscriptions may be set the fact of the constant appearance of Demeter in the vase-paintings that come from this district; it is perhaps not too much to say that Demeter-myths have furnished more subjects for the artists than any others.⁷⁹ Also Herodotus⁸⁰ speaks of the existence of a temple of Demeter opposite Olbia; which would be conclusive evidence if there were not a variant reading of Μηρός for Δήμητρος; as it is, the passage can only be quoted as a possible support to the view of the importance of Demeter's cult at Olbia at this early period. In any case, there would undoubtedly have been a temple to Demeter there, whether she held the position of chief goddess of the city or not, as her worship was general among all Ionian states.⁸¹ For the significance of the worship of Demeter 'als althellenische Göttin und als Göttin der Civilization,' Preller-Robert may be quoted⁸²:— 'Die hohe Bedeutung der Demeter für das attische Staatsleben [zeigt sich] deutlich darin, dass sie mit Zeus und Apollon zusammen Schwurgöttin ist, sowohl bei politischen Verträgen als im Eid der Beamten und Richter.'⁸³ This is worth noting here, in view of the apparent association of Apollo and Demeter at Olbia as civic deities.

The Olbian coins bearing heads of Demeter give rise to questions of considerable difficulty. Head,⁸⁴ under Olbia, says that the principal type on

⁷⁸ Two of these (Lat. ii. 7, 20), are of the fourth century B.C.; the other (Lat. ii. 13), to Demeter Θεσμοφόρος, of the third century B.C.

⁷⁹ For some beautiful representations of these vases, see the *Compte-Rendu*, passim.

⁸⁰ iv. 53.

⁸¹ Cp. Preller-Robert. *Gr. Myth.* i.² p. 754. For other references to worship of Demeter in

Ionian cities, see Herod., vi. 16 (Ephesus); ix. 97 (Miletus); Strabo, xiv. 633; Dittenberger, *Sylloge*² 655; *I.G.A.* 501; Diog. Laert., ix. 43; Athen. ii. p. 46, F.

⁸² *Gr. Myth.* i.² p. 781.

⁸³ See *C.I.A.* i. 9, 13, ii. 49, b. 578.

⁸⁴ *Hist. Num.* p. 233.

the gold and silver money is the head of Demeter. This seems somewhat misleading. The Berlin catalogue only gives one gold coin of Olbia⁸⁵ (excluding the late coin of Pharzoius, No. 146); this has a head of Demeter. Out of the seven silver coins described (31-37), only two have heads of Demeter (including No. 37 with the head of Demeter-Tyche). The British Museum catalogue only describes one silver coin (No. 1), and it has Demeter as type. Von Sallet, in describing No. 31 of the Berlin catalogue, says that No. 1 in the British Museum (see fig. 4 below) is an example of the same coin in bad silver, and that a very good example is that given in *Zeitsch. f. Num.* X. Taf. iii. The head on this latter coin is very much more beautiful than that in the British Museum example. De Koehne, who describes about 160 Olbian coins, only gives nine which bear heads of Demeter, three of which are silver and six copper.⁸⁶ Pick, in his first volume, which has already been so often quoted, gives five plates of Olbian coins, in which presumably examples of every known type are given, but unluckily the letterpress describing the plates has not yet been published, so that the number of existing examples of each coin is not indicated, nor have we the editor's aid in vexed questions of identification. One hundred and eight coins are represented in Pick's plates, of which about seventeen can be quite certainly assigned to Demeter, excluding those of which the identification is more or less doubtful. Two of these coins are gold (the only gold ones in the collection, leaving out three very late ones) and four silver; the rest are all copper. So the statement of Head, which could be made more emphatic with regard to the gold coins, on which Demeter seems to be the only type in the earlier period, appears to require modification with regard to the silver ones, as well as the addition that the head of Demeter is frequently found on copper coins.

Before considering the various types of Demeter which appear upon the coins, it will be best to attempt to determine the significance of the wheat-ear which appears as a reverse type on many, and the grain of wheat which is seen on others: (the wheat-ear also occurs as a counter mark). But these emblems frequently occur with a fish-type (to give it this general though unscientific name), and the discussion of the two cannot be kept apart. If the fish-type represents a sturgeon or a sterlet, so very common in the rivers of South Russia, it may fairly be considered a commercial emblem, and the wheat-ear can fall into the same category; if on the other hand it represents a dolphin, the commercial significance is scarcely possible. Lenormant⁸⁷ regards it as a sterlet, 'type de la mouette saisissant le poisson sterlet,' and says that it is imitated from the coins of Sinope; it is certainly impossible to look at the coins in question, dating from 415 B.C.,⁸⁸ without being struck with the close resemblance to the type on the Olbian coins. They are probably earlier than the Olbian coins, the type of which may therefore have been borrowed from them; we shall notice below under Helios another possible instance of an Olbian coin with a type borrowed from Sinope.

⁸⁵ No. 30, Taf. ii. 18. Similar to Pick's example, Pl. ix. 18, though not the same coin.

⁸⁷ *La Monnaie dans l'Antiquité*, i. p. 158.

⁸⁸ B. M. Cat. Pontus, P. 95 et seq., Pl. xxi.

⁸⁶ Musée du Prince Kotschoubey, i. p. 64, 65. xxii.

In the British Museum catalogue both these types are described as dolphins. Some of the types on Olbian coins undoubtedly are dolphins, *e.g.* the reverse type of Pick's example, Pl. ix. 24, which has probably a head of Poseidon on the obverse; but there are other coins, notably Pick, Pl. ix. 3, where the long snout, the position of the eye, and the straightness of the fish seem to indicate a sterlet rather than a dolphin. Where the fish is curved, it would seem safer to identify it as a dolphin, especially as the dorsal fin near the head, which is a characteristic of the dolphin but not of the sturgeon, seems to be clearly shown on most of the Olbian coins of this type.⁸⁹ Perhaps it is impossible now to decide which type the Olbian die-cutters intended to represent. Would it be hazardous to conjecture that the general pattern of the type—the sea-eagle upon the fish—was borrowed from Sinope, and that the idea of the original wavered between the emblematic dolphin and the purely commercial sturgeon? There undoubtedly is a good deal of difference in type between these fish-like creatures, which this hypothesis seems to explain. When we find an ear of grain and a fish-type on the same coin, and further remember that grain and dried fish were two of the main exports of Olbia, it is difficult not to think that the commercial explanation is the true one.⁹⁰ The dolphin is not the most obvious emblem of Apollo, and it does not seem at all certain that it would have been chosen to accompany the wheat-ear if it had been intended to symbolise Apollo and Demeter together as civic deities.⁹¹ The obverse type of these coins is sometimes Apollo, sometimes Demeter.

To come to the coins themselves. The first coin (after the copper ones in Plate VIII.) given by Pick (Pl. IX. 1, gold) does not show the wheat-ears in the hair of the goddess very clearly, but this is only because the coin is struck unevenly, and little room is left on the top of the head for them to appear. The reverse shows the eagle and fish-type, and above the eagle is a wheat-ear. The heads on No. 2 (silver)⁹² and No. 3 (copper) more distinctly indicate Demeter, as in each case the two wheat-ears in the hair, above the forehead, are clearly shown. Both these coins, and also 4, 5, 6 (which have Demeter on the obverse), have the eagle on the fish, in varying attitudes, as reverse type. Of these coins von Sallet in the Berlin catalogue, under No.

⁸⁹ If the dorsal fin is really the decisive feature, perhaps it may help to decide the question of the fish-shaped coins of Olbia in favour of Mr. G. F. Hill's alternative explanation—that they are degenerate representations of pigs of bronze, as a pig of metal was sometimes called *δελφίς* (cp. French *saumon*), (*Handbook of Gr. and Rom. Coins*, p. 3). The most marked characteristic of these fish-shaped pieces is the dorsal fin just behind the head.

⁹⁰ Note that Von Sallet describes the head of a fish, which appears with a grain of corn as the reverse type of No. 83 in the Berlin catalogue, as a sturgeon's. Apollo's head is on the obverse of this coin, which is the same as Pick,

Pl. ix. 14, and is of very good style.

⁹¹ The tunnies on the altar from Cyzicus described by Mr. Hasluck (*J.H.S.* xxii. (1902), p. 128), were recognized as such by peasants on the spot; it would be interesting to know if a South Russian peasant would identify the Olbian coin-type as a sturgeon. The fish on Pick's Pl. ix. 3, also ix. 22, is not at all like the typical dolphin that appears, *e.g.* on coins of Tarentum. (See Gardner's *Types of Greek Coins*, Pl. i. 22, etc.)

⁹² Similar to No. 1 in the Brit. Mus. Cat., given in hg. 4, where the fish seems to resemble the sturgeon rather than the dolphin.

38, says: 'The heads on the pieces with this reverse type are sometimes certainly Demeter with light wreath, sometimes Apollo, laureate (perhaps). Distinction is difficult on account of careless workmanship.' The heads on 7 and 8 are more doubtful. The next that is clearly Demeter is 15. This has a fish-type on the reverse, as have also 17, 18, 19. Both the wheat-ear and the fish-type appear on 16. The head on 30 is very similar to some of



FIG. 4.—SILVER COIN OF OLBIA IN THE BRITISH MUSEUM.

those which are clearly Demeter, but in this case the reverse type is a bow in case and an axe. In Plate X. we have more of the coins with the eagle and fish as reverse type, of which 12 and 13 appear to be probably Demeter. The other coins are of more doubtful attribution.

Next comes the series of coins with the turreted female head on the obverse, and the kneeling archer on the reverse.⁹³ The wheat-ears in the coin given in fig. 5 seem to make the identification as Demeter-Tyche



FIG. 5.—BRONZE COIN OF OLBIA IN THE BERLIN MUSEUM.

certain, though there is apparently no other example of the walled crown on the head of Demeter. It belongs, of course, commonly to Cybele, and frequently to Aphrodite⁹⁴ and Anaitis.⁹⁵ Artemis has it on the late imperial coins of Gerasa in the Syrian Decapolis,⁹⁶ and at Chersonesus.⁹⁷ The British Museum has an example of these Olbian coins (No. 17), which is described as 'Head of the City, left, wearing a mural crown and necklace.' The heads of the Tyche of the City, or City-goddess, are of course too common on coins to need illustration, but the identification with Demeter seems to be

⁹³ Pick, Pl. x. 1-4. Pl. x. 1 is No. 119 in the Berlin catalogue, and is given in the accompanying figure 5. Is the choice of the archer as reverse type significant of local feeling, like the bow and battle-axe on the Borysthene series?

⁹⁴ Especially in Cyprus, see Farnell, *Gk. Cults*, ii. p. 704.

⁹⁵ E.g. on coins of Amastris in Paphlagonia,

early third century B.C. See B. M. Cat. (Pontus).

⁹⁶ Farnell, *Gk. Cults*, ii. p. 585.

⁹⁷ Von Sallet says under coin No. 4 (Berlin Cat.) Taf. i. 6. 'Artemis, as City-Goddess, seems here to resemble Tyche, as very probably Demeter on the copper coins of Olbia (with the archer as reverse).'

unique. It may be noted that the coin given by Pick (Plate XI. 1) with the turreted female head on the obverse, has the reverse type of the eagle (on the fish ?) very similar to the type on the coins which undoubtedly have Demeter on the obverse.⁹⁸ The last Olbian coin in Pick's examples, a silver piece of King Inismeus, has also a Tyche head as the reverse type.

The number and variety of these coins seem to make clear Demeter's importance at Olbia—second only to Apollo; a position easily understood considering that the staple trade of Olbia was the exportation of grain.

Cybele.

The cult of Cybele may be taken next, not because we have evidence to prove that it was of special importance at Olbia, but because it has already been referred to twice under Demeter.

We have only one inscription referring to this cult at Olbia, given by Latyshev,⁹⁹ and it is of Roman date:—

[ἡ δείνα . . .]ωντος τοῦ Διονυσίου
[θυγά]τηρ, Σωκρατίδου γυνή.
[Σωκ]ρατίδης Φιλίνου τὴν ἑαυτοῦ γυναῖκα
Μητρὶ θεῶν ἱερησαμένην.

There is, however, an inscription from Panticapaeum of the third century B.C.,¹⁰⁰ which may be quoted here as evidence, if any is needed, that the cult of the Great Mother existed in this district in the earlier period:—

Βασιλεύοντος Παιρισάδου τοῦ Σπαρτόκου Ἑστιαία Μηνοδώρου θυγάτηρ
ἱερωμένη ἀνέθηκεν Μητρὶ Φρυγίαι.

The reading of *Μητρός* for *Δήμητρος* in Herod. iv. 53. has been already spoken of under Demeter; and, if accepted, would of course give very much higher antiquity for the cult. None of the Olbian inscriptions containing the name of a deity go back anything like so far as the date of Herodotus' visit to Olbia, so that he is our most ancient authority for anything concerning the cults of the city.

Pick¹⁰¹ gives one coin which bears a head of Cybele; a reproduction is given in fig. 6. It is apparently rare, as there is no example in the Berlin collection, and De Koehne¹⁰² only quotes one, which seems to be the same as that given by Pick:—

⁹⁸ The two kinds of mural crowns should of course be carefully distinguished, that belonging to the Tyche type, and the much heavier one with the veil, worn by Cybele. A reference to the accompanying figures will make this clear. See also De Koehne on this point (*loc. cit.* p. 68). He sets the date of these Olbian coins

at 250–200 B.C., just at the time when the personification of the Tyche of the City was becoming common throughout the Greek world.

⁹⁹ i. 107.

¹⁰⁰ ii. 17.

¹⁰¹ Pl. x. No. 35.

¹⁰² *loc. cit.* p. 66.

| <i>Obverse.</i> | <i>Reverse.</i> |
|--|------------------------------------|
| Tête couverte d'un voile, tombant en arrière et d'une couronne murale, derrière un rameau en contremarque. | ΟΑΒΙΟ— ΠΟΛΙ Tympanon. Æ. 2½. |

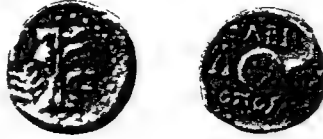


FIG. 6.—BRONZE COIN OF OLBIA (FROM PICK)

Cybele, is, however, a frequent type on the coins of the North Euxine district of Imperial date. Several examples are given by Pick (Plate XVIII.) where full figures of the goddess occur; note especially No. 14, a coin of Istros, where the lions beneath her throne are very distinct. De Koehne¹⁰³ mentions the finding of a colossal seated statue of Cybele at Panticapaeum, which so exactly corresponds to the type on the coin that it would seem almost certain that the latter is a copy of the statue. The Athenian statue of the Mother of the Gods by Pheidias¹⁰⁴ seems not to have worn the mural crown. Arrian¹⁰⁵ does not mention it among the other attributes, and the numerous Attic votive reliefs, which must have had this statue as their type, do not show it.¹⁰⁶ The cult of Cybele in its various aspects approached so closely to that of other female deities that a distinction is often difficult. She was looked upon as the foundress of states and cities, whose walls she wears as a crown like the Syrian Astarte, hence her name 'mater turrita' or 'turrigera.'¹⁰⁷

G. M. HIRST.

¹⁰³ *loc. cit.* p. 67.¹⁰⁴ By Pheidias according to Paus. i. 3, 5. and Arrian; according to Pliny (*N.H.* 36, 17), by Agoracritus. It represented the goddess with a cymbal in her hand, and lions under her chair.¹⁰⁵ *Periplus*, p. 9.¹⁰⁶ Stephani, *Herakl.*, p. 67.¹⁰⁷ Verg. *Aen.* vii. 785, Ovid, *Fast.* iv. 219. See O. Jahn, *Arch. Zeit.* 1864, 174, A. 3, who says the tower-crown probably came from Asia to Greece (Böttiger, *Kunst. Myth.* i. p. 286); when it became prevalent is not known. See also Mr. A. J. Evans, *Myc. Treas. and Pillar Cult*, *J.H.S.* vol. xxi. (1901), p. 166.

NOTES ON HELLENISM IN BACTRIA AND INDIA

How far can the kingdoms in Bactria and India, ruled by kings with Greek names, be called Hellenistic, and how far were they simply native? These pages were put together with this question in view; they have no claim to be more than an attempt to get certain problems stated, to which some day some further answer may be given by the spade. The series of these kings stretches from the revolt of Diodotos, about 250 B.C., to the final merger of Indo-Greek rule in that of the Indo-Scyths in 26 B.C. The period is bisected by the conquest of Bactria by the Yue-tche, which probably took some little while to complete, but with respect to which our information centres on the year 128 B.C. By the time of Augustus, a number of merchantmen were sailing directly from the Red Sea to India, a rare event under the Ptolemies; and this traffic increased later, when in the reign of Nero was made that discovery, or rediscovery, of the monsoons which is associated with the name of Hippalos. To arrive, therefore, at any ideas about the kingdoms of Alexander's successors beyond Parthia, it is necessary to distinguish as carefully as possible the information with regard to India, and the traces of western influence on things Indian, which can be dated later than (say) the Christian era, (and which belong rather to the history of Rome), from information which can be, or may be, dated prior to 26 B.C., or I might almost say prior to 100 B.C., (the time between these two dates being for my purpose a blank): and only to make use of the former sources when they clearly refer to something that falls within the period under consideration. The general result appears to be, that one meets with more of the Iranian and less of the Greek than one expected.¹

I.

Greek life, if it existed anywhere, must be looked for in the towns. Bactria and the adjoining provinces were full of them; the thousand cities of Bactria passed into a proverb.² The first envoys of the Han emperors were

¹ I follow the history as given in Prof. P. Gardner's *The Coins of the Greek and Scythic Kings of Bactria and India in the British Museum*, 1886 (cited as P.G.). For other recent accounts of the history proper, so far as it can be deduced, I may refer to von Gutschmid, *Geschichte Irans*, 1888; M. E. Drouin in the

Grande Encyclopédie, s.v. 'Bactriane'; and W. Tomaschek in *Pauzy-Wissowa*, s.v. 'Baktrianoi.'

² Under Eukratides, Apollodoros ap. Strabo. 15, 686—this *might* refer to the Punjāb. Under Diodotes, Justin 41, 1, 8; 41, 4, 5—this cannot refer to the Punjāb.

struck by the great number that they saw. Every Greek ruler in the East seems to have founded one or more. Omitting those of Alexander and Antiochos I, we know of one foundation of Euthydemos, one of Eukratides, one at least of Demetrios.³ But as at the outset we are met by the fact that the only four towns of which history or legend has anything to tell (with the possible exception of Alexandria of the Caucasus) are *native* ones, it will hardly do to assume that a Greek foundation in the far East was a city with a municipal life and government, a polis, in the same sense as a foundation in Syria, or even in Parthia. However, as city goddesses appear on some of the coins,⁴ this may have been the case in some instances.

Justin, wise after the event, speaks of Alexander's towns as settled by the most unruly elements of the army, which is improbable; but as to the manner of settlement little is known.⁵ Certainly Alexander, in conformity with his general policy, would encourage the settlers to take native wives: so that the only period, during which it is probable that the country could have been settled as Syria, for instance, was settled, is during the rule of Seleukos's son Antiochos in the eastern provinces. If free Greek or Macedonian women then went out, (as to which we know nothing), Greek language and customs might persevere for several generations, as in the Branchidae town; failing this, the settlements would tend to orientalise themselves very quickly,⁶ and the people would soon become indistinguishable from natives.

It will be convenient to group a good deal of what I have to say round those cities of which alone more is known than the names. These are Bactra, Sagala-Euthymedeia, Taxila, and Eul-che, the 'royal city' of Ta-yuan.⁷

³ 'Εὐθυδήμων ἄνασσα (see W. Tomaschek in *Pausanias* art. 'Baktriane'); Eukratideia; Demetrias in Arachosia. I omit Euthymedeia.

⁴ E.g. coins of Philoxenos, Hippostratos, Azes, Zeionises; and a coin of Peukelaos published by Mr. V. A. Smith, *J.A.S.B.* 1898, p. 132. This of course proves nothing as to whether the burghers were Greek, native, or both. There is nothing that corresponds to the Seleukid city coinages; unless it be at Taxila.

⁵ Justin, 12, 5, deduced from the revolt of the Greeks after Alexander's death. Arrian 4, 4, says mercenaries, and barbarians who volunteered, and time-expired Macedonians (of Alexandreschate). Curtius 7, 7, 27 (of the same town) 'captivi, quos . . . liberavit.' The captivi would be from Cyropolis. As Cyropolis seems to have risen again and superseded Alexandreschate, (*see post*, p. 232) Curtius's version, which would help to explain this, may be correct. Diodoros 17, 83, (of the cities near Alexandria of the Caucasus), bears out Arrian. The reference in Diodoros to mercenaries who volunteered is of importance. Curtius (7, 3, 23) seems to imply that volunteers settled in Alexandria of the

Caucasus. 'permissum . . . considere.' These notices are not all in agreement, and, so far as they go, do not agree with the great number of Greeks settled in Bactria and Sogdiana, who rose on Alexander's death. There must have been a later importation of Greek settlers: 'nuper deducti,' says Curtius, 9, 7, 1.

⁶ The Branchidae town, settled with Greek men and women under peculiar circumstances, became bilingual in about six generations (Curtius, 7, 5, 29). The Barkaeans, settled at the same time in Bactria by Darius (Herod. 4, 204), are not again heard of. Some remarks on the orientalising of the new towns in Droysen, *Hellenismus*, III. 69. Livy, 38, 17, in Syros degenerarunt, &c., is special pleading.

⁷ A considerable legend has grown up round Alexandria of the Caucasus, seemingly based on nothing but the one well known reference to 'Alasudda the capital of the Yóna country' in the Mahavanso, which may not refer to this Alexandria at all; the Egyptian capital is also a candidate, though a most unlikely one (S. Levi, 'Le Bouddhisme et les Grecs,' *Rev. de l'Hist. des Religions*, vol. 23 (1891): cf. the Ptolemaic gravestone with wheel and trisula found by Prof. Petrie, *J.R.A.S.* 1898, p. 575: !

1. Bactra the Royal, mother of cities, traditionally one of the oldest inhabited sites in the world, must from its associations have been the natural capital. Alexander no doubt intended it to be the capital of the province, if it was he who renamed it Alexandria.⁸ Under the corrupted form of Lan-chi it became, at least for a time, the capital of the Yue-tche after their conquest of Bactria.⁹ But for the Chinese we should not have known of the perseverance of the Alexander-name;¹⁰ the native name not only again prevailed, but, in the mouths of the western world, was applied even to the Thibetan invaders.¹¹

After Alexander, it is heard of as standing a celebrated siege: von Gutschmid's conjecture, that this was a siege of Euthydemus by Antiochos III, seems in the present state of our knowledge the only possible one.¹² If so, it may be supposed that the town was the capital of Euthydemus's dynasty; and this is perhaps supported by a figure of Artemis radiate on one of Euthydemus's coins, which may refer to the celebrated statue of Anaitis at Bactra, described in the Avesta.¹³ Now Eukratides, the usurper, founded a town Eukratideia, which, being near the old capital, and bearing his name, may well have been intended as the capital of the new dynasty; but his son and murderer, Heliokles, must have returned to Bactra, as it was the capital when the Yue-tche arrived. Possibly something may be deduced from this.

It is clear that to accomplish the very considerable conquests made by Euthydemus and Demetrios, this dynasty must have been favourably regarded by the native Bactrians, as indeed may be gathered from Polybios.¹⁴ Now without believing all the details of Justin's story of the death of Eukratides, it is, I think, safe to infer this much, that in some way the usurper, for all his power, was looked on as a traitor to Bactria, and as such slain by

and why not Bactra-Alexandria? The legend makes this town a centre of Greek life in the East, the birthplace of Menander, and the last town ruled by a Greek king (Hermaios=Yin-muf-foo ruling in Yung-ken=Younaki, Greek town). All that is known about it is that it was twice founded by Alexander.

⁸ As to this, M. Specht, 'Les Indo-Scythes et l'Époque du Règne de Kanichka' in *J.A.* ser. 9, vol. 10, pp. 159-161. It may be the real meaning of I huy, 6, 25 (23). It would probably be a workable hypothesis that Alexander intended the capital of each satrapy (anyhow in the East) to bear his own name. Hence he founded no Alexandrias beyond the Indus; for he intended to establish there not satrapies, but protected native rulers. Macedonian fondness for renaming places, Strabo 11, 518.

⁹ As appears from the annals of the lesser Han. See Specht in *J.A.* ser. 8, vol. 2, p. 321.

¹⁰ Converse instance of the double name in the case of Merr, Gr. Antiocheia: the Chinese preserved the native name in the form Mu-lu, (for Muru).

¹¹ *c.g.* the 'Bactrians' of the Periplus. Sometimes the Greek and Kushan rule is even confused together, as *Ann. Marc.* 23, 6, 55. Perhaps even in Justin; 2, 13, the Scyths founded the Parthian and Bactrian kingdoms—this must refer to the Yue-tche. Tomaschek (*Pauly-Wissowa*, 'Baktrianoi') says compendiously, that when classical writers from 140 B.C. to 560 A.D. say Bactrians they mean Tochari (Yue-tche).

¹² Polyb. 29, 6a, 8: *Gesch. Irans*, p. 37.

¹³ She wears a golden crown with eight rays and a hundred stars, and is clothed with the skins of thirty beavers of the sheen of silver and gold. Her statue set up in Bactra, *Clem. Alex. Protr.* p. 57. The description, a lengthy one, is in the *Ābān Yast*, §§ 126-129, see Darmesteter's trans. of the 'Zend-Avesta,' (in *Sacred Books of the East*), vol. 2, p. 82; also p. 53 for M. Halévy's suggestion that this description was taken from a consecrated type of statuary.

¹⁴ Polyb. 10, 49; no troops of Euthydemus are mentioned except the Bactrian horse.

Heliokles; and as Heliokles was associated in the kingdom, and Eukratides appears to have been returning from India, Heliokles must have been governing in Bactria. Heliokles further returned to the native capital, associated with the prosperous reign of Euthydemus, and the stronghold of Zoroastrianism. It is possible therefore that Heliokles, whose subsequent reign seems to have been a long one, in this matter represented native opinion. Now Eukratides probably came from the west; at least this appears to be a fair inference from the facts that he boasted his Greek or Macedonian descent, that his mother was royal and bore a name usually associated with the Seleukids, and that he appears to have introduced the Seleukid cult of the Dioscuri-Cabiri.¹⁵ The usurper might in any case desire a new capital; but the professor of a new cult would dislike the stronghold of Zoroastrianism, while the Greek might be revolted by the peculiar and unpleasant custom of a city which reared dogs, locally known as 'undertakers,' who were trained to devour the dying,¹⁶—a custom that even Alexander had failed to abolish. The point of this argument is, that if Eukratides represented some sort of a reaction, it can only have been a reaction towards Hellenism and away from Iran;¹⁷ and if this view be at all well founded, then his new city of Eukratideia must have been less of an oriental town than its neighbours, and, being new built, would be the place, if its site were ever located, where Greek architectural remains might be expected, if the Bactrians ever produced such architecture. It would seem, in fact, to be the most likely place to test the theory, still held by some writers, that India learnt its Graecised architecture of the Gandhara type from Bactria.

2. Sagala-Euthymedeia. Sagala, capital of the Cathacans, had been taken and razed by Alexander. But as the town appears in Ptolemy with a Greek name attached,¹⁸ for which Euthydēmia was an obvious conjecture, such conjecture was long since made and has been universally accepted, and the town in consequence has been associated with Demetrios's conquests in India, and treated as renamed by him after his father. It is, however, not easy to see where the difficult MS. reading Euthymēdeia came from, if it be not correct. There is nothing whatever to associate this town either with Demetrios, or

¹⁵ Taken together, these particulars may carry some weight; in particular, it is difficult to see where else a royal Laodike can have come from; unless indeed it were from some dynasty in Arachosia or Aria, concerning which great provinces our knowledge is a blank, but which are treated as separate kingdoms in the Annals of the elder Han (if indeed Arachosia be Kepin, as M. Drouin supposes). The coins, indeed, know nothing of such dynasties: but they would leave us equally ignorant of Ta-yuan. As to the connection of Eukratides's coin-type with the Syrian Cabiri, Babelon, *Rois de Syrie*, xxxi.—Seleukos II (246–226 B.C.) had taken the Dioscuri as a type.

¹⁶ Onesikritos ap. Strabo. II, 517, ἐνταφιστάι. The town was fair without, but within 'full of

men's bones.'

¹⁷ It is conceivable that, if Tiogus were recovered, it would be found that Eukratides's offence against Bactria was religious. Alexander's edict against the dogs nearly brought on a revolt; Porph. *de abst.* 4, 21.—Onesikritos (St. II, 517) says Alexander stopped the custom, with which a rhetorical passage in Plutarch agrees. But the version that he *tried* to must be correct, as von Gutchmid takes it; Zoroastrianism was excessively tenacious of customs.

¹⁸ Σάγαλα ἢ καὶ Εὐθυμεδεία, see p. 273. Its site does not appear to have been identified: see J. W. McCrindle, 'Ancient India; its invasion by Alexander the Great,' p. 347, note M. Lahore is one conjecture.

with Euthydemos, whose coins do not appear to have been found further east than the Indus at Attock.¹⁹ On the contrary, all the legendary associations of the name are with Menander, whose capital it traditionally was. Unfortunately the elaborate description given in the 'Questions of King Milinda' is of no value as a help to the understanding of what a Graeco-Indian town was: for the author has frankly set to work to draw an ideal Indian great city as a residence for his hero. All it proves is that Sagala was important enough for the description not to appear an absurdity; and, as it was not the residence of the viceroy of the Punjâb under the Mauryas, its importance *may* have been brought about by the Greek rather than by the Indian kings; with this would agree the conjecture of General Sir A. Cunningham, based upon the coin-finds, that during the later period of Greek rule in India, when Greek and Saka kings occupied the Punjâb side by side, Sagala, and not Taxila, was the capital of the former.²⁰

As Sagala went down to fame in India as Menander's capital, this may be the place to notice the Menander tradition. We can say this much with a good deal of probability, that in some way or other he greatly struck the imagination of the East. It is a commonplace that in such a case the hero in Asia appropriates to himself the deeds of other men; much becomes attributed to an Alexander or a Timour that he never performed. Now it was long since noticed that Plutarch's story of the division of Menander's remains among eight towns was a duplication of, or taken from, the similar Buddha story; and an attempt has recently been made to show that the conversations between Nagasena and Milinda recorded in the 'Milinda' were in fact originally attributed to, or are based on conversations attributed to, the sage (who may not have been a contemporary of Menander²¹) and an older king, Nanda or Ananta.²² If this should be established, the *double* attribution to Menander becomes very strong evidence indeed of a considerable impression made by him upon his contemporaries, an impression that was hardly likely to be due to an interest in philosophy, but was more probably to be accounted for by simple conquest, very possibly

¹⁹ P.G. xxii, as to Euthydemos. P.G. xav, "The coins of Demetrius come in almost all cases from Bactria."

²⁰ *Num. Chron.* 1890 p. 110. Adopted by Mr. E. J. Rapson, *Ind. Coins*, § 30 (in Buhler's *Grundriss der Indo-ar. Philol.* 1898). If "Moga" of the Manikyala copper-plate be Maues (P.G. xlix), this becomes almost a certainty as regards Taxila.

²¹ Prof. Rhys Davids's translation of the 'Milinda' in *Sacred Books of the East*, vol. i, p. xxvi.

²² "A historical basis for the questions of king 'Menander' from the Tibetan," by Dr. Waddell, *J.R.A.S.* 1897, p. 227. "Chinese translations of the Milinda Panho," by J. Takakusu, *J.R.A.S.* 1896, p. 16. The form "Ananta" known to the Lunas: the Chinese

translation—date given as between A.D. 317-420—gives Nanda; query, Nanda of Magadha? Tibetan sources make Nagasena and Nanda contemporary.—Criticism by Count Goblet d'Alviella, *Bull. de l'Acad. Royale de Belgique*, 1897, vol. 33, p. 688 n, to the effect that Prof. Rhys Davids takes the Pâli back to 1st cent. A.D., *i.e.* prior to the Chinese version. I do not find that he takes it further back than its citation by Buddhagosa as of conclusive authority, about 430 A.D. D'Alviella however does not deal with that part of Dr. Waddell's article which attempts to show, by tables, that the rainfalls mentioned in the "Milinda" do not suit the Punjâb at all; and no criticism can carry much conviction which does not first dispose of this definite matter of the rains.

stimulated by some accession of Greek force driven southward from beyond the Hindu-Kush.²³ As to the contents of the 'Milinda,' they may or may not give us any information about the historical Menander. The trade references are more likely to belong to the writer's period. The birthplace may be a genuine tradition; if so, all that is proved is that it was *not* Alexandria of the Caucasus.²⁴ The thing that one would like to believe in, as a mention of a Greek ruling caste, is the council of 500 Yonakas. But with the date of this work as uncertain as it is, it would be absurd to press this.

Whether the real Menander turned Buddhist or not, there is no question that tradition connects him with Buddhism; a sufficiently natural policy for a stranger, and one probably already adopted by Agathokles, and more strongly later by the Kushan Kanishka. This may perhaps suggest an explanation of the name Euthymedeia. Professor Rhys Davids has conjectured that the inscription *δίκαιος* on the coins of some of the kings may have been placed there to please Buddhist subjects, even if it does not (as he thinks it does not) refer to the Buddhist Dharma.²⁵ The wheel on one of Menander's coins has also been claimed as a Buddhist emblem. It is worth tracing the word *δίκαιος* a little further. So far as I have been able to ascertain, it does not occur on Seleukid coins. On the Parthian, it appears first with Mithradates I, who made conquests in India, or anyhow in White India, that were apparently not held. Among the Bactrians, the first to use it is Agathokles, who issued coins with Buddhist symbols, and who appears to have ruled over a further portion of India than any predecessor.²⁶ Later, the word becomes common among Parthians, Greeks, and (in its Indian form) Sakas; but if in three of the earliest instances, Agathokles, Mithradates I, and Menander, the use of the word coincides with an extension of rule over some part of Buddhist India; in one case, Agathokles, with a Buddhist symbolism; and in one Menander, with a Buddhist tradition; it appears to me quite possible that the term refers to, and that the kings in question claimed, not merely the

²³ We are interested in the Greek for his art and literature. But to his contemporaries he must have meant, chiefly, the best of all known fighters; until the Roman came. The Roman, having beaten him in the field, could afford to exalt his art and literature.—Apollodoros ap. Strab. 11, 516, attributes to the Bactrians (principally to Menander) the conquest of more nations than Alexander; and it is of interest to notice that Alexander's name is said not to occur in Indian literature, which possibly records Demetrios as well as Menander.

²⁴ That is, if Prof. Rhys Davids is correct in calling it an 'island.' Sir A. Cunningham however would translate Alasandadipa as "the country of which Alasanda was the capital" (*J.A.S.B.* 1893, vol. 62, part 1, p. 86, communicated to Mr. V. A. Smith).

²⁵ In the introduction to his translation of the 'Milinda.'

²⁶ See *post*, under 'Taxila'; and see note 19. Assuming him later than Demetrios, Taxila appears to be the furthest east yet attained: the coins in fact do not bear out the tradition of Demetrios's conquests in India, which may only mean that he was the first to cross the Hindu-Kush; unless Demetrios' elephant-sculp refers to this. Whatever the legend Hidujasame means ('Just to those born on the Indus,' Bendall ap. P.G. lxxiii; 'King of Indians,' von Sallet; Of me, Agathokles, 'Indian by birth,' S. Levi doubtfully in "Le Bouddhisme et les Grecs," *Rev. de l'Hist. des Religions*, vol. 23 (1891), p. 41, criticising the older interpretations), it appears to refer to some close connection of Agathokles with India.

ordinary righteousness of kings, but the Buddhist uprightness.²⁷ It may also be remembered that in the case of Menander the tradition preserved by Plutarch speaks of the fairness of his rule. If then Euthymedeia be translated 'the town of the Upright Ruler,'²⁸ a reasonable sense for the MS. reading can be obtained without resorting to conjecture, and the only association of this place known to us is preserved. It does not follow that the town was ever *called* Euthymedeia; the word may be merely a paraphrase of some native term.²⁹

3. Taxila. This city is the most interesting of those we meet with. According to one theory,³⁰ the name means 'the rock of Takshaka,' king of the serpents, and brings the place into connection with that aboriginal race who, as the Nagas or serpent folk, play so large a part in Buddhist art and legend, and who were, traditionally, the means of preserving the 'true' Buddhism of the Greater Vehicle. Whether a prae-Aryan town or not, Taxila appears as in perpetual opposition to the ruling powers. Its prince aided Alexander against Poros. When Macedonian rule was established, a Brahmin from Taxila instigated Chandra-gupta's revolt. When the Mauryan empire was established, Taxila (says tradition) revolted against Chandra-gupta's son Vindusara, and was not subdued until Asoka himself was sent; subsequently Asoka ruled there as his father's viceroy. When the empire of the Mauryas began to break up, Taxila was probably one of the earliest towns in India to come, for the second time, under Greek rule³¹; while, if Cunningham's before-mentioned conjecture be correct, it was one of the earliest to cease to be ruled by the Greek kings, who continued to reign at Sagala after Taxila had become subject to the Saka dynasty of Maues and his successors.



FIG. 1.—BRONZE COIN OF TAXILA (Single Die).

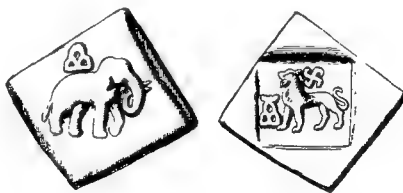


FIG. 2.—BRONZE COIN OF TAXILA (Double Die).

These statements can be illustrated from the coinage. The town had struck a square bronze native coinage, with a design only on one side (Fig. 1).

²⁷ This would of course have nothing to do with their own belief.

²⁸ It is no objection that the word would be poetical. There are at least two undoubted poetical words on the coins, *ἀνικητον* and *τυραννουντος*, the former as early as Demetrios, and common; add perhaps *νικηφορου* and the obscure *θεοτροπου*. Also the poetical name of Hermaios's queen, Kalliope. (On the adoption

of Muse-names in late Hellenism, see von Gutschmid, *Gesch. Irans*. 116.)

²⁹ A very similar case is that of the Bactrian town *Εὐθοδήμου ἄνασσα*, which must in fact have borne the queen's actual name.

³⁰ See McCrindle, *Ancient India*, before cited, p. 342, note I, "Taxila." Its site has been identified with Shah-deri.

³¹ Agathokles's coins, *post*.

This coinage was imitated in the square bronze money of Pantaleon and Agathokles.³² Agathokles's bronze money is said to be found near Taxila, and as bronze does not travel far from the place of issue, it is possible that this square coinage was minted at Taxila in the existing mint. Later, the town struck double die square coins of its own (Fig. 2), the art of which is said to show the influence of the money of Agathokles, and which were in turn imitated by the Saka king Maues.³³ Therefore, before the time of Maues, *i.e.* fairly early, this town was either independent or autonomous. As this is the only phenomenon of the kind that occurs, except the city-goddesses before referred to, it is worth seeing if anything can be deduced from the coins as to the constitution of this town.

Of the square coins of Agathokles, one (Fig. 3) bears on the reverse a 'maneless lion,' on the obverse a nautch girl; the other (Fig. 4)³⁴ obv. a stûpa



FIG. 3.—BRONZE COIN OF AGATHOKLES.

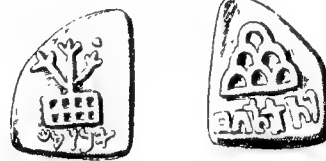


FIG. 4.—BRONZE COIN OF AGATHOKLES.

and a star, rev. a tree within a rail. The latter coin, of course, as has been noticed, can only have been struck to meet the susceptibilities of Buddhist subjects;³⁴ but no one seems to have thought it necessary to consider whether their susceptibilities would have been equally pleased by a dancing girl. Now the best known legend connected with Taxila is the story that near there Buddha, in a previous existence, had given his head to feed a starving tiger, a story commemorated in Asoka's foundation there of the stûpa of the 'Head gift.' This stûpa must be the one that appears on Fig. 4, and not some imaginary foundation of Agathokles's, which is in itself unlikely;³⁵ and I would conjecture that the 'maneless lion' of Fig. 3 is also an allusion to the same story, and is in reality the attempt of the semi-Greek artist at a tiger.³⁶ In this case

³² Rapson, *Indian Coins*, § 56.

³³ The star is obliterated on the specimen here illustrated, but clear on others, *e.g.* P.G. No. 15.

³⁴ Cf. the use of δίκαιος; see p. 273.

³⁵ M. S. Levi, in *Le Bouddhisme et les Grecs*, already cited, at p. 43; Agathokles, "soit par conviction, soit par politique, aurait élevé un stûpa." This stûpa coin is perhaps imitated by a copper coin from Khotan, which appears to bear traces of a stûpa; Dr. A. R. Hoernle in *Ind. Ant.* 1898, p. 227.

³⁶ It used for a long time to be believed that a species of maneless lion existed in Gujerat.

This is now said to have been conclusively disproved, the individuals in question being only immature specimens. (See *e.g.* *Enc. Brit.* s. v. 'lion.') I do not see therefore why they should figure on the coinage. Mr. E. J. Rapson (*J.R.A.S.* 1900, p. 103) gives a seal which he compares at length with the square coins of Agathokles and Pantaleon; the lion has a mane. The figure on the coins is certainly a poor tiger; but it would also be a poor lion; and as no Greek could ever manage a good lion, it is unreasonable to suppose that a designer on the fringe of Hellenism would succeed better with a tiger.

the coin in Fig. 3 would also be Buddhist. The dancing girl then would have to be connected with Buddhism in some way, and may perhaps be a reference to another well known Buddha story, his temptation by the Apsarases or nymphs, as Cunningham conjectured for the dancing girls of the Mathura sculptures³⁷; only the artist has imported a good deal of realism into his picture.

This leaves the star over the stûpa unexplained; nor have I seen any attempt to explain it. What follows is a guess.

When Taxila again struck its own coins, it did not try to imitate Agathokles's *Greek* coins, but struck square ones with Buddhist symbols³⁸; the Greek coinage was an exotic, a bit of Greek art put at the service of Buddhism, exactly like the well-known vihara at Taxila with Ionic columns. But if we hear nothing of a Greek colony, we do hear of an *Iranian* one. Aristoboulos knew that, unlike the rest of India, the people of Taxila exposed their dead to vultures³⁹; which can only mean that here were a considerable number of Zoroastrians. Agreeably to this, it is said that the low caste Chandalas there acted as corpse-bearers. This is no more than might have been expected, seeing that, for instance, Asoka in appointing a governor of Gujerat saw good to appoint one who from his name must have been an Iranian, and that Iranian traders or settlements were probably numerous in that region.⁴⁰ It appears to me that this Iranian element, which must have furnished considerable assistance to the second invasion of India by Demetrios and his successors, has also left a trace of itself on the coins in the star over Agathokles's stûpa.

The great number of Iranian deities that figure on the coins of the Kushans or Indo Scythians is well known. One theory is, that the Kushans learnt Zoroastrianism on the Oxus.⁴¹ Suppose, however, that the Bactrian kings had worked the mints with Greek or Graecised artists and Iranian workmen, as is probable enough. After two or three generations, Greek influence wears out; Eukratides, and more especially Heliokles, restore the Persian weight standard; if the Kushans found the mints in Iranian hands, with some tincture of Greek art, it is natural that the Iranian coin-designer would attempt to introduce part of his own symbolism.⁴²

Applying this to Agathokles's coin, Fig. 4, I believe that the star, which

³⁷ 'Stûpa of Barhut,' p. 27. It has been noticed that the dancing girl is the only purely Hindu type that occurs, prior to Siva on the coins of Oeomo Kadphises (P.G. 124); and this is an additional reason for finding an explanation for her.

³⁸ Rapson, *Ind. Coins*, Pl. 1, 13; caitya on both obv. and rev.

³⁹ Strabo, 15, 714.

⁴⁰ The name is Tusâspa; M.S. Levi, '*Quid de Graecis veterum Indorum monumenta tradiderint*,' 1890, p. 4, and generally. These Iranian settlers would be of more assistance to the Bactrian invaders than would Alexander's

Indian foundations, if subsisting.—The Graeco-Bactrians seem to have found a Persian weight system established in the Punjab; Rapson, *Ind. Coins*, § 8.

⁴¹ Dr. A. Stein in *Ind. Ant.* for 1888 (vol. 17), p. 89, 98, 'Zoroastrian deities on Indo-Scythian coins.'

⁴² It might be objected that the gold coins of the Kushans are not struck on the Persian standard, but approximate to the weight of the Roman aurei. Very likely, however, they are aurei restruck. (Cunningham in *Nun. Chron.* 1889, p. 277.)

has nothing to do with a *stûpa*, is Sirius. Dr. Stein⁴³ has identified the figure with a bow and arrow on Huvishka's gold coin as Sirius, 'whose later name, Tir, in Pahlavi and Persian actually means "arrow"'; he reads the legend as TEIPO, and shows that Tir in this meaning is derived from the Zend tighri, and that in some way the attribute of swiftness had become affixed to the star, whose swift flight was compared to that of the arrow. Dr. Stein proceeds to cite part of a passage from Eustathius, which, when read as a whole, seems to carry us one step further than was necessary for his purpose.⁴⁴ Briefly, if it was doubted whether the name of the Tigris, swiftest of rivers, was derived from the arrow or the tiger, and if it is stated that the similar name of Tir, brightest of stars, is derived from the arrow, it is an easy piece of guess-work that there may also have been a popular connection between the star and the tiger; and an Iranian designer, drawing the *stûpa* of the Head Gift, with the tiger story in his mind, may have been led by this connection to put in the star, merely perhaps as some addition of the symbolism of his own creed, but possibly too as evidence of some unknown joint cult of the two faiths.⁴⁵ I need hardly add that the above is put forward simply as a guess for what it may be worth.

Whether however Taxila can give much information about Iranians or not, it gives none about Greeks.⁴⁶ The celebrated vihara is not dated; the coins of Azes found under it merely show that it was not built *before* Azes; it may be altogether outside the period I am considering.

4. Eul-che, the 'Royal city' of Ta-yuan.⁴⁷

According to Strabo, the conquest of the Hellenes in Bactria made certain Scythian tribes famous. This conquest took place barely four generations after the revolt of Diodotos. The Chinese have left accounts of the then state of the countries which had originally formed the eastern part of the empire of Seleukos, and afterwards the Bactrian system or empire, these accounts being based on the report of Tchang K'ien, (128 B.C.), who had been sent as an envoy to the Yue-tche, then encamped to the north of the Oxus, and who visited personally, beside the Yue-tche, the nomad K'ang-kiu (north of Bokhara), and the settled countries of Ta-yuan (Kho-

⁴³ In the paper above referred to.

⁴⁴ Eustath. ad Dionys. Perieg. 976, Bernhardt. Tigris swiftest of all rivers. διὸ φασὶ καὶ Τίγρις καλεῖται, ἥγουσι ταχὺς ὡς βέλος. Μῆδοι γὰρ Τίγριν καλοῦσι τὸ τόξευμα. But some say it is called from the tiger; (follows a story); καὶ ἄλλως δὲ δίχα τῆς μυθικῆς ταύτης ἐπιβολῆς τὴν πρὸς τὸ ζῶον ὁμωνυμίαν ὁ ποταμὸς ἔχει διὰ τὸ τοῦ ρεύματος ὀξύ. For the tiger is very swift. Cf. the supernaturally swift tigers in Herodotos.

⁴⁵ Cf. an interesting suggestion of Dr. Hirth, that the metal mirrors with Bacchic symbols imported into China under the Han emperors might refer to a joint cult of Dionysos and Haoma; *Ueber fremde Einflüsse in der Chines. Kunst*, p. 25 seq.

⁴⁶ I purposely refrain from attempting to use

Philostratos. Yet he must at least be evidence of a belief that Taxila would be a reasonable location for such a story as his.

⁴⁷ For the Annals of the Elder Han I use A. Wylie's trans. of 'Notes on the Western Regions,' *J. Anthropol. Inst.* 1881, cited as 'Wylie'; for Sze-ma-ts'een, T. W. Kingsmill's translation of ch. 123 in *J.R.A.S.* 1883, vol. 14, 'Intercourse of China with Eastern Turkestan in the 2nd century B.C.' cited as 'Kingsmill.' Prof. Chavannes' translation has not yet, unfortunately, reached ch. 123; but his introduction, pp. lxx to lxxviii, deals with its subject-matter. Every Chinese scholar seems to transliterate the proper names differently; where I can, I have used Prof. Chavannes' spelling.

kand) and the Ta-hia (Bactria).⁴⁸ Chinese scholars appear to be satisfied that our accounts correctly represent what Tchang K'ien says he saw. It ought to be possible to some extent to argue backwards from these documents.

First of all, Tchang K'ien distinguishes pretty clearly the warlike nomad races from the settled peoples whom he calls unwarlike. The former are the Yue-tche and K'ang-kiu, the latter the Ta-hia and the peoples of Ta-yuan, Ngan-si (Parthia), Kepin (? Arachosia), and Woo-yih-shan-le ('Aria). The last three countries he had not visited personally. Also, he knows nothing of any former Bactrian *empire*. Each of the states he deals with is, for him, a separate kingdom. So far as this goes, it supports the idea that the break up of Seleukid rule in the East was followed by a number of independent Greek rulers. The Bactrian may from time to time have made himself overlord⁴⁹; but Tchang K'ien knows nothing of any preponderance of the Ta-hia.

The various points that he makes about the settled populations, from Ta-yuan to Ngan-si, are somewhat as follows.

(1) They can make themselves mutually understood, allowing for variations of dialect, from Ferghana to Parthia.⁵⁰ This speech was of course Iranian. This statement would not be inconsistent with the use of Greek, or bilingualism, in the cities; but nothing of the sort appears to have been observed.

(2) Their military power was small,⁵¹ and the Ta-hia were unwarlike.⁵² It was unfortunate to include Ta-yuan in the general statement, seeing that barely a generation later the little state not unsuccessfully resisted the strongest expedition that China could send. But the remark about the Ta-hia is interesting. Looking at the sudden extension of Bactrian power after Diodotos, and the reputation as fighters left in India by the Yavanas, it is hardly what we should have expected. I fancy the right explanation must be that of Justin; they engaged in too many wars, and bled to death.⁵³ When Tchang K'ien saw them, the strongest elements of the population were either dead or driven south over the Hindu Kush. He gives their then numbers at upwards of a million. It is possible of course that he was not indisposed to belittle the enemies of the Yue-tche, whose friendship he had been sent to solicit.

(3) The men all had deep blue eyes and large beards and whiskers.⁵⁴

⁴⁸ Wylie, 67.

⁴⁹ See note 53.

⁵⁰ Wylie, 45; Kingsmill, 94. Cf. Strabo, 15, 724 Ariana includes parts of Media and Persia as well as Bactria and Sogdiana; *εἰς ἡμᾶς πᾶσι καὶ ὁμόγλωττοι παρὰ μικρόν*.

⁵¹ Kingsmill, 83. This seems to be applied to Parthia as well as to Ta-yuan and the Ta-hia; but elsewhere he knows of the power of Parthia, Kingsmill, 81.

⁵² Wylie, 41, 'weak and afraid to engage in war.' Kingsmill, 82, 'weak and cowards in battle.'

⁵³ 41, 6. siquidem Sogdianorum et Arachotorum et Drangianorum Indorumque bellis fatigati, ad postremum ab invalidioribus Parthis, *velut exsangues*, oppressi sunt.—Justin clearly contemplates separate states here. But one cannot depend on him as accurate merely because he is scanty. Strabo as clearly mentions a preponderance of Bactria, 11, 516, 517; the Hellenes who held Bactria held Sogdiana also, and conquered Ariana and the Indians—this last from Apollodoros.

⁵⁴ Wylie, 45; Kingsmill, 94.

The beard still marks the Irani. If there was any Greek ruling caste anywhere he does not mention them; still, though he notes a general similarity between the inhabitants of all these countries, it is only of the eastern part of Parthia that he says definitely that the people were all of one race.⁵⁵

(4) The men were astute traders, who would wrangle about a farthing;⁵⁶ and they had a large commerce.⁵⁷ I have considered the question of commerce in a separate section of this paper.

(5) Among the Ta-hia there was no supreme ruler, each city and town electing its own chief.⁵⁸ So Sze-ma-ts'een. It is impossible to read this as meaning a break-up into city communities, after the fashion of Syria. The parallel passage in the Annals of the Han,⁵⁸ and the analogy of Ta-yuan, where the two towns mentioned have each a king, show that what is intended is something much more like the system of local chieftains and fortresses which Alexander had found in the country, a system perhaps that had never really yielded to Hellenism.

(6) They paid great deference to their women.⁵⁹

This statement creates a grave difficulty, as it will not apply to any race except one, and that is not the conquered Ta-hia at all, but the conquering Ta Yue-tche, who were Thibetans and polyandrous. Tomaschek cites this passage as an authority for polyandry among the Yue-tche⁶⁰ (which is said to be otherwise attested) without seeming to see the difficulty, viz. that it is not applied to the Yue-tche at all, but to the settled peoples. There may have been some peculiarity local to Bactria and the neighbouring lands of which we are ignorant, and which would explain it; but failing this it seems to me that there are only four alternatives: (a) that Tch'ang K'ien has made a bad mistake—a matter which, as he lived among the Yue-tche and visited the Ta-hia, would seriously impair the authority of practically the only eye-witness for any part of the period under consideration; (b) that the writers who used his report have introduced some error, a matter hardly less serious⁶¹; (c) that in some way the mistake has arisen through the Ta-hia being in fact not the Bactrians but the Tochari, one of the hordes of the invaders; (d) that the Yue-tche conquest was a gradual affair, and that the Bactrians, before the occupation of their capital, had become permeated with the manners of their conquerors.

Of these alternatives, (c) is almost incredible. Ta-hia cannot be

⁵⁵ Kingsmill, 91.

⁵⁶ Wylie, 45; Kingsmill, 94.

⁵⁷ Kingsmill, 83.

⁵⁸ Kingsmill, 82. The parallel passage (Wylie, 41) reads that the Ta-hia 'were originally without a chief paramount, and were accustomed to set up petty chiefs over their cities.'

⁵⁹ Wylie, 46. 'Women are honourably treated among them, and their husbands are guided by them in their decisions.' Kingsmill, 94, 'They held their women in high estimation,

and the husband commonly took his wife's advice before coming to a decision.' This statement appears to be made of all the countries westward from Ta-yuan as far as Parthia.

⁶⁰ 'Ueber das Arimasische Gedicht von Aristes,' in *Abh. d. k. Ak. der Wiss. in Wien. h. phil. Clas.*, 116, (1888), p. 751. Some writers treat the Yue-tche as Turks.

⁶¹ But not impossible. There must be a similar error, whatever its nature, in the contradictory statements as to the use of silk; see *post* p. 290.

Tocharia; the Ta-hia throughout are the *conquered* race,⁶² and, if they are not the native Bactrians, the whole of the Chinese account becomes an insoluble puzzle.⁶³ (d) is in one way possible. We know that some little time elapsed between the settlement of the Yue-tche on the north bank of the Oxus and their conquest of the capital⁶⁴; we know that they found it necessary or advisable to pass by Ta-yuan altogether without attacking it⁶⁵; we might conjecture from one of the coins, if genuine, that some little while previously they had been fighting with the Bactrians with varying success.⁶⁶ Bactria may have become lost to its Greek rulers by something of the same gradual process as, for instance, that by which Southern Gaul became lost to the Roman empire; but even were this the case, it is difficult to suppose that this particular form of the manners of the conquerors would be adopted by a conquered people of alien race, religion, and temper.

If the reference be not to polyandry, it is equally obscure, as it scarcely accords with what is known of the domestic systems of Greeks, Persians, or Parthians; and we must conclude either that there is here something peculiar to Bactria and the neighbouring districts, and otherwise unknown, or that there is some mistake in the authorities which may tend to impair their credit on other points.

Now in all this no trace appears of anything *Greek*, unless it be the name Lan-chi and a reference to the Parthian coinage.⁶⁷ The objection, however, as regards Bactria, may be taken, either that the Chinese envoy could not or did not distinguish Greeks from natives, or that the whole Greek element had retired to India; and this might be supported by Strabo's statement that the Scythians 'took Bactria away from' the Hellenes. It might also be conjectured that the outburst of Greek activity in India associated with the names of Apollodotos and Menander was connected with the expulsion of the Greeks from the countries north of the Hindu Kush

⁶² In 'Notes on the Western Regions' they do not even have a separate section from the Yue-tche.

⁶³ The name Ta-hia is so far unexplained. It does not even seem to be certain whether it means Great Hia or not. But the common explanation that Ta-hia = Dahae seems impossible. Ta hia may be good Chinese for Dahae; but unless it can *only* mean Dahae, which is clearly not the case (see e.g. Dr. Hirth, *Ueber fremde Einflüsse*, p. 23), it is worthless without some fact to support it. No connection of the Dahae with Bactria is known. The theory is, that they may have joined in the Saka invasion; but (1) the Chinese only mention the Sakas, (2) if so they were driven out with the Sakas before Tehang Kien came. As a fact, the Dahae remained in their original seats, beyond Margiana, and contributed a refuge for Parthian pretenders, and mercenaries for Parthian and Seleukid kings; Artabanus III.

(c. 8 A.D.) lived among them, Tac. *Ann.* 2, 3; they fought at Magnesia, Livy, 37, 40, and at Raphia, Polyb. 5, 79; see also Strabo, 2, 718 and Ptol. 6, 10, and Prof. P. Gardner 'The Parthian coinage,' 1877 (in Marsden's *Numismata Orientalia*), pp. 12, 13—Identifications by similar sound are worthless in themselves, unless used to support deductions from facts.

⁶⁴ Specht in *J.A.* 1883, p. 321 seq.

⁶⁵ See note 68.

⁶⁶ Coin representing Macedonian horseman charging two riders on an elephant; Prof. P. Gardner takes the riders to be Yue-tche, and the coin to commemorate a victory of either Eukratides or Heliokles; *Num. Chron.* 1887, p. 177; but its genuineness is said to be doubtful.—Is it possible that the 'Bactrians' of Justin, 36, 1, 5, allies of Demetrios Nikanor, were really an advanced horde of the Yue-tche? See note 11.

⁶⁷ Wylie. 39. Kingsmill, 81.

and the concentration of their energies on a narrower field, to be again curtailed by the Saka conquest of the Western Punjâb.

There is however one country north of the Hindu Kush to which this latter objection cannot possibly apply, as all accounts agree that the Yue-tche passed by it and came round to attack the Ta-hia from the west:⁶⁸ and therefore the Chinese must have found it in whatever was its normal state of development.⁶⁹

This is Ta-yuan, the country about Khokand and Uratube, south of the Syr and south-west of Ferghana. Here Alexander had settled a capital and Antiochos I. had kept a general; Strabo goes out of his way to quote Apollodoros to the effect that the Greeks possessed Sogdiana,⁷⁰ a name which would include the province in question. In the time of Tchang K'ien Ta-yuan was the only part of Sogdiana not occupied by nomads, the K'ang-Kiu possessing the valley of the Polytimetos, and the Yue-tche holding the country along the north bank of the Oxus, which may have been included within the limits of Bactria.⁷¹ Alexander had settled several forts here beside Alexandreschate; and the Alexander-romance, curiously enough, speaks of voluntary settlements of Alexander's friends in Sogdiana.⁷² This district moreover commanded the northern and easier of the two old trade-routes into the Tarim valley; so that, although far from what must have been the centre of the Graeco-Bactrian system, it may nevertheless be a locality in which traces of Greek settlement should be expected.

Sze-ma-ts'een⁷³ tells the story of a Chinese expedition against Ta-yuan, (about 102 B.C.), to procure for the emperor some of the famous Shen horses of celestial race that sweated blood, which he coveted. The first expedition was defeated; but prisoners and ruffians were impressed, and a second army of 60,000 men, not including engineers and the seven classes of criminals used as transport, together with 100,000 cattle, more than 30,000 horses, and 10,000 baggage animals, including camels, and commanded by 50 generals, left Chinese Turkestan to attack this outpost of the west. Half the effective force appears actually to have arrived before the 'Royal' city, Eul-che,⁷⁴ to have defeated the Sogdian horse-archers, and to have stormed the outer town, while the engineers diverted the river that flowed through it; but the Sogdians must have fought with the same courage with which their fathers had resisted Alexander,⁷⁵ for the Chinese despaired of taking the inner city,

⁶⁸ Wylie, 41; Kingsmill, 81. Specht in *J.A.* 1883, p. 322, 'passerent au delà de Ta-Ouan'

⁶⁹ This does not exclude the possibility of Ta-yuan being one of the kingdoms formed by the Sse (Sakas); cf. the horse-archers, and the coins referred to, note 85.

⁷⁰ Strabo, 11, 517.

⁷¹ Tomaschek, in *Paulys-Wissowa*, s.v. 'Bactriane.' Strabo however is clear that the Oxus was the boundary.

⁷² For instance, Dr. Budge's *Life and Exploits*

of Alexander the Great, from the Ethiopian, pp. 183, 186. For volunteers at Alexandreschate, note 5.

⁷³ Kingsmill, 83 to end.

⁷⁴ Kingsmill transliterates Urb-shi, Dr. Hirth Ir-schi; de Lacouperie wished to read Nise.

⁷⁵ It is interesting to compare this account with the siege of the same town, (Cyropolis), by Alexander (Arr. 4, 3). Alexander took the outer city by thirst. As to the identification, see note 83.

particularly as the besieged had recently secured the services of some 'men from T'sin' who knew how to dig wells. Finally the besieged killed their king, Mou-koa, who was supposed to have instigated a previous murder of Chinese envoys, and sent out his head, with a promise of some horses if the Chinese retired; but if driven to extremities they would kill the horses and call in the K'ang-kiu.⁷⁶ The Chinese general took the horses, apparently with some admission of Chinese suzerainty as well, and returned home without entering the inner city, taking with him cuttings of the grape-vine, and some plants of lucerne for the horses.

The utmost possible has been made of this story from the Greek point of view.⁷⁷ Ta-yuan becomes the great country of the Yonas or Greeks, its capital Nise, its horses Nisaeen,⁷⁸ its king Μέγας. It appears to be admitted that the Chinese names for grapes and lucerne are really Greek;⁷⁹ but the rest is based on nothing but a similarity of sound, and seems to be of little value, more especially Nise. Mou-koa is said to be a possible representation of μέγας;⁸⁰ but to make out the point, it would be necessary to prove that μέγας alone is a possible name for a Greek king—as for instance Lucan can talk of Pompey as Magnus.⁸¹ I shall hope to show presently that, supposing Ta-yuan to mean Great Yona land, this need not refer to Greeks.⁸²

But the reasons for which I have given this story at length are the following: (a). Two cities of Ta-yuan are mentioned, the Royal city, Eul-che, and another, Yeou-tch'eng; and this latter has also a king. That is to say, five generations after Diodotos the country is still (or again) as Alexander found it, broken up into separate local chieftaincies. (b) If Eul-che, as universally supposed, be Uratube, and Uratube be Cyropolis, we get the important and startling result that the Persian foundation, which Alexander had razed and scattered, had again become the capital of the province, to the exclusion of his own town of Alexandreschate (Chodjend). But too much stress must not be laid on this, as the identification of Uratube with Cyropolis is not an absolute certainty.⁸³ (c) The 'men from T'sin.' It

⁷⁶ The same threat that Euthydemus used to Antiochos III.

⁷⁷ T. de Lacouperie, *Western origin of early Chinese Civilisation*, pp. 220, 221.

⁷⁸ As the revival of the letter San on the Kushan coins appears to be generally accepted, and as this letter, (sound sh), is known as used in Greece for branding horses, it ought to be suggested, to complete the list, that the Shen horses were σαμφόραι. For a suggestion that Ta-yuan = Strabo's Τουριοίαν (the province beyond Merv) lost by Eukratides to the Parthians. and translated by Brunnhofer, *von Arol bis zum Gangä*, 61 seq., as ἱππόβορος, i.e. Nisaeen fields which he places between Balkh and Merv) see Hirth *Ueber fremde Einflüsse*, &c., p. 24; it is geographically quite impossible, as Dr. Hirth sees. A considerable number of places called Nisaea are known; but the 'fields' were

certainly in Media.

⁷⁹ P'u-tao, vine = βότρυς; Muh-tuk, lucerne = μηδική (πόα).

⁸⁰ By Prof. Chavannes in his Introduction before cited.

⁸¹ The only case that occurs to me is the coins of the so-called Nameless king, P.G. xlvii., Kabul valley, circ. A.D. 30-50; the inscription is generally βασιλεὺς βασιλεύων σωτὴρ μέγας; possibly Kushan.

⁸² See p. 287.

⁸³ Eul-che = Uratube; Prof. Chavannes in the Introduction before cited, p. lxxv; Dr. Hirth, *Ueber fremde Einflüsse*, &c., p. 21; both on a consideration of Chinese evidence. Cyropolis = Uratube; von Schwarz, *Alexander des G. Feldzüge in Turkestan*, (1893), pp. 51, 52. The stream and citadel are there; the town gave more trouble to the Russians than any

is out of the question in 102 B.C. that they should be Romans. They must therefore almost certainly have been Greeks, whether from Syria, Parthia, or Bactria.⁸⁴ Wherever they came from, however, they are noticed as foreigners, and the historian understands the difference between them and the natives of Ta-yuan. This suggests that Tehang K'ien might have informed himself of the same difference, had he come across it; and furnishes some reason for supposing that he makes no mention of Greeks in Bactria because there were none there to mention.

So far as Ta-yuan therefore is concerned, the case seems to be that the only Greek elements that commend themselves as fairly certain are the names for grape and lucerne, and the presence of certain foreigners in the citadel. It does not appear, for instance, that any coins of the Greek kings have been found so far north.⁸⁵

II.

So much has now been ascertained as to what India does or does not owe to the west,⁸⁶ that it ought to be possible in some sense to argue backwards, and to see if anything can be deduced from this as to the Bactrians. I may say at once that, omitting architecture and sculpture, the only debt that appears to be proved by any evidence that would satisfy a jury is astronomy, and this belongs to the history of Alexandrian astronomy of a much later date.⁸⁷

What will have to be considered in this connection may conveniently be grouped under three headings: 1. architecture and sculpture, 2. language, 3. the name Yavana.

1. Can it be deduced from ascertained results, of which far the most important here is the broad one that the Gandhara school cannot well commence before the Christian era and shows Roman influence, whether Greek or Graecised architecture was ever at the service of the Bactrian

other in Khokand and Bokhara.—Mr. D. G. Hogarth (*Philip and Alexander of Macedon*) does not accept von Schwarz's identifications as sufficient, in the absence of excavation.

⁸⁴ Hardly the last, having regard to the date.

⁸⁵ In the British Collection of Central Asian Antiquities are seven silver tetradrachms from 'Samarkand, Tashkend, and other places in Western Turkestan,' which imitate coins of Helioles and Euthydemos, and some of which are referred by Dr. Hoernle (*Ind. Ant.* 1898, p. 225 *seq.*), to circ. 150 and 130 B.C. Are they Saka?

⁸⁶ For discussions of this question, see (among other things) Weber, 'Die Griechen in Indien,' *Sitz. d. Ak. d. Wiss. Berlin*, 1890; Levi, *Quid de Graecis*, &c.; Count Goblet d'Alviella, *Ce que l'Inde doit à la Grèce*, 1897, and his series of articles in the *Bull. de l'Acad.*

Royale des Sciences de Belgique, vols. 33 and 34 (1897), (strongly pro-Greek); Mr. V. A. Smith's three articles, 'Graeco-Roman Influence on the Civilisation of Ancient India' in *J.A.S.B.* 1889 (vol. 53), 1892 (vol. 61), and 1893 (vol. 62); and a clear summary in Prof. A. A. Macdonell's recent *History of Sanskrit Literature*, p. 411 onwards.—Greek or Graeco-Roman influence is of course generally treated as a whole.—Bibliography of the large literature relating to the architecture and sculpture is given by Mr. V. A. Smith, and by Dr. Burgess in his recent edition, with translation, of Prof. Grunwedel's *Buddhistische Kunst in Indien*. My references to Grunwedel are to the second German edition (1900), as this paper was practically completed before I saw the translation.

⁸⁷ *Notes on Hindu Astronomy*, by Dr. Burgess, *J.R.A.S.*, 1893, p. 717.

kings? The answer to this question was once an unhesitating affirmative; but that is ancient history. There is, however, a theory, held by D'Alviella,⁸⁸ which may be described as a sort of rule of three; as the semi-Greek Kushan coinage is to the Gandhara school, so should the coinage of the Bactrian kings be to a (vanished) school of pure Greek art. That is to say, the coins postulate a contemporary school of architecture and sculpture, of which most, if not all, of the traces have vanished. A supporter of this theory might adopt Cunningham's former suggestion that possibly the conquering Yue-tche destroyed all the works of art in question,⁸⁹ and might argue (and justly) that this theory cannot be *disproved* until, for instance, Balkh and the site of Eukratideia have been properly excavated. But it cannot either, with our present material, be proved. There is no evidence that the Yue-tche, whose conquest of Bactria may have been a gradual one, were mere vandals; they occupied, not destroyed, the capital; they spared certain pillars and stûpas of Asoka, and quickly took over the mints. The author of the *Periplus* knows of old shrines standing, inland from Barygaza, attributed to Alexander. The positive evidence in support of the theory is scanty in the extreme. There are certain figures in the architecture of the Asoka period, centaurs, man-headed bulls, and other half-human types, which may be due to Greek influence, probably filtered through a Persian medium; but the explanation of their adoption may be entirely religious or philosophical.⁹⁰ So far as I have been able to discover, the existing remains of 'Indo-Hellenic,' as distinguished from Indo-Persian, art, even possibly contemporary with the Graeco-Bactrian or Graeco-Indian kings, or even admittedly free from Roman influence, are the Lahore Athene, the Vihara with Ionic columns at Taxila, and the sculptures at Mathura.⁹¹ The viihara appears to be 'dated' by the coins of Azes found undisturbed beneath it, that is to say, it cannot be earlier than about 30 B.C., and may be later. The Athene however is Greek,⁹² and might be earlier than Azes, though it resembles the type on his coins. But most of the 'Indo-Hellenic' sculptures come from Mathura. These are said not to belong to the Gandhara school, and to show undoubted Greek influence not conveyed through Roman

⁸⁸ See also Oldenberg's essay on 'Buddhistische Kunst in Indien' in *Aus Indien und Iran* (collected essays, 1899), esp. pp. 116, 117; and cf. Mr. Vincent Smith's *Indo-Hellenic* school.

⁸⁹ *Arch. Survey of India*, vol. 5, 189.

⁹⁰ Grunwedel, pp. 17, 51, 57. They may be meant, he thinks, to symbolise the doctrine of transmigration and rebirth; in each stage of animal existence the human may be concealed, to be released through good works. It is interesting to meet the celebrated *Βουγενὲς ἀνδρόπρωρον* in India serving the use of an alien philosophy.

⁹¹ Certain traces of Greek or Graeco-Roman influences appear in the art of Khotan, which was so largely influenced by that of India; see for instance the seals from Taklamakan given by

Dr. Hoernle ('A collection of Antiquities from Central Asia,' *J.A.S.B.* 1899, vol. 68, part 1, nos. 24, 26, 32 and 33 on plate 3, and no. 11 on plate 19), which include two figures of Athene; and the clay seals representing Athene and Eros referred to by Dr. Stein in his recent *Preliminary Report* of his excavations in Chinese Turkestan, at p. 53. Dr. Stein says 'There is good reason to believe that this influence was exercised, partly through Bactria, partly through Gandhara and the adjoining regions on the N.W. frontier of India.' I do not know if any date has yet been suggested for these figures of Athene, or if they may be earlier than the Gandhara school.

⁹² Grunwedel, 81; 184 'direkt als griechische Göttin ist dargestellt Athene Promachos.'

channels.⁹³ How they got there is a problem whose difficulty may be gauged by the fact that Grünwedel suggests a relationship between this school and the residence of Seleukos's ambassador Megasthenes at Patna, a somewhat desperate theory, and perhaps inconsistent with the fact that coins of several of the Indo-Greek kings are said to have been found in the Mathura ruin-mounds.⁹⁴ Few however would care to maintain that the Bactrians must have brought Graecised architecture to India *because* the one group of sculpture that shows undoubted Greek influence is found at the furthest point from Bactria to which any Greek king can well have penetrated. If this theory of continuous Hellenic influence, which cannot be proved, should, however, ever be *disproved*, the result would be that the beautiful coinage of the earlier Bactrian kings would have to be considered as what naturalists call a 'sport.'

But if, upon present materials, no continuous Hellenic influence can be shown, this is not the case with the influence of Persia. Few things strike the ordinary reader more, on looking through Grünwedel's Handbook, than the stress laid upon Persian influence. So far as the art, which suddenly appears full blown under Asoka, owes anything to the stranger, it owes it to Persia; the Indo-Persian school continues through a line of stūpas to Amravati in the first century: Persian forms appear even among the alien art of Gandhara. It is difficult, in the face of this, to avoid supposing that such art as existed in Bactria was more native than Greek. It is perhaps also to the point to remark that no monument of any sort showing classical influence has yet (so far as known to me) come to light which *must* belong to the period between Asoka and the last Indo-Greek king: and such a blank may be in itself significant.⁹⁵

I have not overlooked the much-quoted words of Hiouen Tsang. When the Chinese pilgrim, some six centuries after the Yue-tche conquered Bactria, visited Amravati, he is reported to have said that the famous Tope was adorned 'with all the magnificence of the palaces of the Ta-hia.'⁹⁶ This proves nothing at all; because Hiouen Tsang does not date his 'palaces.' But supposing it to refer to Bactria prior to the Yue-tche conquest, then, if any one likes to attribute to the Chinese pilgrim an exact knowledge of the architectural style of six centuries previously, it would prove that the Bactrian architecture was like Amravati, viz., Indo-Persian; which is hardly the result contemplated. No one supposes that the kings had not palaces of some sort, as indeed Tchang K'ien expressly states with regard to Kepin.⁹⁷

⁹³ Grünwedel 80. Mr. V. A. Smith has suggested tentatively 200 A.D. for this school.

⁹⁴ Cunningham, *Archaeol. Survey of India*, vol. 3 (1870-72), p. 14; coins of Apollodotos, Menander, Strabo, and Antimachos.

⁹⁵ Perhaps the fact that a station on the silk route became well known as 'The Stone Tower,' (Ptolemy), may even suggest that in the neighbourhood, Sogdiana for example, stone architecture was rare and remarkable.—I have not

met anywhere with a description of the 'Greek' pillars at Oosh in Ferghana, mentioned by Vambéry (*Central Asia*).

⁹⁶ From Julien's translation. D'Alviella, (*Ce que l'Inde*, &c. p. 82) cites this passage, together with Philostratos, for a continuous Greek art.

⁹⁷ Wylie, 34, 35 the people of Kepin are ingenious in building palaces and mansions.

2. Nothing then at present known to us postulates with any certainty a Graecised architecture or sculpture among the Bactrians. Does anything postulate Greek speech? Omitting Philostratos, and statements in rhetoricians about Indians reading Homer, our knowledge seems to be this: that Greek writing persevered on the Indo-Scythian coins; that on the coinage of the Graeco-Indian and Saka kings the letter-forms change; that after A.D. some Indians read Alexandrian treatises on astronomy; and that the Branchidae town, which Alexander destroyed, had become bilingual in six generations or thereabouts.⁹⁸ The reading of astronomy books means nothing, while it is always possible to argue that Greek on the coins remained as a dead token, as we use Latin; but in view of Dr. Stein's brilliant conjecture,⁹⁹ that the ρ of the Indo-Scythian coins is in fact San revived, there remain two very strong arguments for the continuous use of Greek as a living speech. San is known as a numeral, as a mark used to brand horses, and as used for sigma in an old spelling of Dionysos;¹⁰⁰ a revival of San therefore must mean that Greek numeration was still in use. And if, as I assume, the changes in the letter-forms correspond to those in Greek letter-forms elsewhere,¹⁰¹—such changes being used as an assistance in dating the coins—this becomes the strongest argument of all. But if the Branchidae town, which was settled by Greek men *and women*, was bilingual in six generations, then it is fair to argue that Kanishka's die-sinkers, if they possessed Greek as in any sense a living tongue, and if they were native-born, and not imported by sea,¹⁰² were probably the descendants of Greek settlers *with Greek wives*. The argument perhaps is rather top-heavy; but I think there is enough to show that language must be a strong point for those who believe that Greek civilisation did much for the East.

3. The Yavanas. The passages in Indian literature where this name occurs have been collected by M. Levi,¹⁰³ who believes that the name means Greek and nothing else. But one of the first things that strikes the reader of his book is, that the writers quoted do not all appear to be talking about the same thing. Sometimes the Yavana is necessarily *local*; sometimes he is not necessarily local at all. On the one hand, the Yavanas are of Indian descent (p. 20), and appear to keep their place for some nine centuries (p. 8) and are linked with tribes like the Gāndhāri, (whose location cannot be doubtful), and the Kamboji, who cannot be located, but whom Spiegel considered to be Iranian. On the other hand, they are people of strange customs, such as reclining at food and shaving the hair; among them, slaves can rise to be masters and masters sink to be slaves; they are settled in and often associated with Gujerat, they invade Oude, and leave behind them a record for furious

⁹⁸ Curtius, 7, 5, 29.

⁹⁹ *Academy*, 10th September, 1887.

¹⁰⁰ Doric; Ath. 466 f. Pindar ap. Ath. 467 b, complains that singers *would* use san ; and as this is generally true, (a German sings *Ish* for *Ich*), the fact that the sound could not die might help to keep the letter alive.

¹⁰¹ P. G. xlvi.

¹⁰² Prof. P. Gardner (*Num. Chron.*, 1887, p. 177 *seq.*) suggests, on grounds of style, that the Kushan kings got their artists from Bactria.

¹⁰³ In '*Quid de Graecis*,' &c. before referred to.

fighting and for adherence to a false religion; eight of their kings reign in India. The notices given of the science of the Yavanas, which do not come to much (pp. 23-24), may, and in one case at least must, refer to Roman times.¹⁰⁴ The Yavana kingdom in Orissa, again, which came to an end in 473 A.D. (p. 41), must refer to something quite different.

I believe there are other indications of a local use of the name, that is to say, of some tribe or people of this name, outside India, but comprised in the Seleukid empire. The name occurs in the three province-lists of Darius; once each in those of Behistun and Persepolis, and twice in that of Nakhsh-i-Rustam. The name in the lists of Behistun and Persepolis and the first name in the list of Nakhsh-i-Rustam is associated with Sparda (satrapy of Sardis), and clearly refers to the Ionians. But toward the end of this list appears, among peoples on the fringes of the empire, the name of 'Yunas wearing helmets.'¹⁰⁵

Again, the Chinese called Khokand Great Yuan (Ta-yuan), and also mention a Little Yuan (Siao Yuan), seemingly in Chinese Turkestan. There is no ground in fact whatever for treating the former as meaning 'the great land of the Yonas' in the sense of *Greeks*. Neither does it appear how or why the Chinese should hit upon this name for Greeks (which the Indians are supposed to have learnt from Persia), especially as a little later their name for the country of the Selenkids is Ta T'sin.¹⁰⁶

It seems to me more than possible that in the name Ta-yuan, and in the 'Yunas wearing helmets' of Darius, we have traces of the local or tribal use of this name.¹⁰⁷ If the 'Sakas wearing hats' of the Nakhsh-i-Rustam list are the recently conquered Sakas of the Jaxartes, as appears probable,¹⁰⁸ it is not unreasonable to seek the 'Yunas wearing helmets' of the same list in the same part of the world, especially having regard to the frequent conjunction of the names Saka and Yavana in Indian writers. And if there were a local Yavana name and country, ruled by other Yavanas from the west, who thence invaded India, the resulting confusion would be obvious.¹⁰⁹ That Yavana some-

¹⁰⁴ One would seem to date from the middle of the first century B.C., but refers only to astrology.

¹⁰⁵ Spiegel referred these 'Kronen tragenden Griechen' to some section of the Greek race; (*Erân. Alt.*, 1, 223); but if the Ionian satrapy had been divided, some notice of it should have been given upon the first occurrence of the name in its usual place, beside Sparda. Clearly the epithet is to distinguish these Yunas from the 'Ionians.'

¹⁰⁶ Hirth, '*China and the Roman Orient*,' (1885).

¹⁰⁷ Prof. Bury has suggested that the Ionians got their common name from an original people of Iavones in Asia Minor; ('Prehistoric Ionians,' *Eng. Hist. Rev.*, 1900, p. 288); but the supposed occurrence of the name in the fifteenth and thirteenth centuries in Egyptian

records appears to be a mistake, see Mr. H. R. Hall, *The Oldest Civilisation of Greece* (1901), p. 129. The connection between 'Ιάπων and 'Ιων is not known (Busolt, *Gr. Gesch.*, 1, 283), and it would be tempting to compare the two forms with Yavana and Yona, but these latter seem to be identical; Levi, '*Quid de Gracis*,' p. 3, (n), 'Yona nomen piacitice idem quod Yavana sanscritice senbitur.'

¹⁰⁸ Dr. F. Justi, *Gesch. Irans*, p. 441, in Geiger and Kuhn's *Grundriss der Iranischen Philologie* (1900).

¹⁰⁹ Since the above was written, I see that Mr. V. A. Smith frankly calls the Yonas of Asoka's Rock Edicts 5 and 13 one of the 'semi-independent foreign tribes on the north-western frontier' of Asoka's dominions; '*Asoka*' (1901), pp. 120, 132. But as he naturally translates the word in Rock Edict 2 as 'the

times means Greek is undeniable. But it appears to me equally true to say, not only that it sometimes has a local meaning, but that it is sometimes applied generally to people who showed the type of civilisation developed in the countries ruled by Greeks. To Asoka, Antiochos is king of the Yonas; but those of them who were settled in Asoka's kingdom were presumably Iranian, as they had a king or governor with an Iranian name.¹¹⁰ It seems to me therefore that the word affords no criterion to distinguish Greek from Iranian. One thing is clear, however, that Yavana is not Saka; consequently one episode, the attack upon Oude and the Mādhyamiki, which can be approximately dated,¹¹¹ must refer almost with certainty to a Greek king. After appearing in Asoka's inscriptions, the name is not again found in a public inscription for nearly three centuries, a gap that corresponds curiously with the gap in the architecture already noticed.

III

Most writers speak of the key to the history of the Greeks of the far East as trade,—an effort to obtain control of the trade with China and the Indian sea-traffic. An obvious explanation is thus furnished both of the extension of their rule to the Tarim valley, if such be the fact, and their efforts to reach the mouth of the Indus. As regards the latter, a sea-borne traffic from India to the west was already in existence, and the explanation is a probable one when the tedium and difficulty of the land routes be considered, especially if the shore-kingdoms of Saraostes and Sigerdis,¹¹² conquered by Demetrios or his successors, be brought into connection with the Yavana colony under Asoka, of which Tusâspa was ruler, and who, it would seem, could only have settled there for commercial purposes. Tchang K'ien also speaks in general terms of the large commerce of Ta-yuan, the Ta-hia and the adjoining people.¹¹³ But what I wish here to consider is the question of trade with China. With the exception of the fact that Aristotle knew of the silk-worm, most of the information to be derived from the usual classical sources with reference to the trade of the East belongs to a later period.

Two immemorial routes lead from the Oxus countries into the Tarim valley and so toward China; the southern one, by way of the upper Oxus and Badakshan to Yarkand, the northern one by way of Ferghana to Kashgar. According to the Annals of the Han,¹¹⁴ the intercourse of China with the 'Western regions' commenced in the time of the emperor Woo-te (140-87 B.C.), that is to say, at the earliest, towards the end of the reign of the last Greek king who ruled north of the Hindu-Kush, according to the coins. Richthofen

Greek king Antiochos,' the confusion I have noticed would be as old as the time of Asoka at least.

¹¹⁰ Levi, p. 4, translates 'Tusâspa, Açoki Mauryensis Yonorum rex.'

¹¹¹ Levi, p. 16. Cunningham interprets Mad-

hyamiki as the people of the middle country, that is. the Gangetic provinces above the Delta (*Num. Chron.*, 10, 225).

¹¹² Strabo, 11, 576.

¹¹³ Kingsmill, 83.

¹¹⁴ Wylie, 20.

dates the first caravan that went through as 114 B.C.¹¹⁵ It must in any case be later than Tchang K'ien, in whose time the Huns were across the route, and who was considering the question of the possibility of traffic going by way of Shuh (Szechuan) and India.¹¹⁶ It seems clear that the Chinese take credit to themselves for opening up the road to caravans, and the meaning appears to be intended that there had been no earlier caravans going through from the Oxus to China, or *vice versa*. By the end of the century this caravan traffic appears to have become extensive; but it does not seem that its commencement can be dated earlier than the period above mentioned, which corresponds roughly with the replacing of the Greek element in Bactria by the Yue-tche; and as the latter subsequently appear as considerable traders, it is permissible to wonder if this be only a coincidence.

But of course indirect trade may have flourished, through the medium for instance of the dwellers in the Tarim valley, to which, according to Apollodoros, the Bactrian kings carried their arms. It is not known what steps these kings took to safeguard their eastern frontiers, but anyhow they were effectual; the Yue-tche came right round and entered Bactria from the *west*, and this rather bears Apollodoros out.¹¹⁷ According to Tomaschek, Bactrian caravans must have been trading with the market town of the Seres, Issedon, earlier than the time of Herodotos, a traffic which continued for centuries¹¹⁸; but this statement, so far as I know, depends entirely for its value on the correctness of Tomaschek's location of the Issedones and other peoples mentioned by Aristes.¹¹⁹ Can the Chinese trade, on other grounds, be carried back prior to 140 B.C. into the flourishing epoch of the Bactrian kingdom?

Coins of some of the Greek kings have been found in the Tarim valley;¹²⁰ but these may have been carried there at a later period, as it is known that they sometimes continued in circulation for a long time after the king's death; the author of the *Periplus* found coins of Menander and Apollodotos still current in Barygaza, and the same may be conjectured of the gold of Eukratides.¹²¹ Later, the Macedonian trader, Maes Titianos, was working this

¹¹⁵ Richthofen, *China*, p. 464.

¹¹⁶ Wylie, 'History of the South-western Barbarians,' *J. Anthropol.* I. 1880, p. 59; de Lacouperie, *Western Origin of Chinese Civilization*, p. 50. This book, though requiring critical use, contains a mass of information about the overland route to China.

¹¹⁷ It may be noted that in the message of Euthydemos to Antiochos (Polyb. II. 34) he speaks of 'admitting' the nomads (*προσδέχεσθαι*) as if through some barrier, which can hardly be the Jaxartes, as they are said to be close at hand.

¹¹⁸ *Pauly-Wissowa*, 'Baktrianoi.'

¹¹⁹ *Ueber das Arimaspiische Gedicht des Aristes* before cited. Issedon = Sera Metropolis = *Χουβδάν* = S'ian-fu. Issedones, a northern branch of the Thibetan race. Arimaspi, the Huns; Hyperboreans, the Chinese; Iranian

influences in Tarim valley, and Iranian trade with Issedon, which may have possessed a merchants' quarter.

¹²⁰ Coins of Menander and Antimachos II. and the 'iron' coin of Hermaios; also Roman coins of Constant II., Justinus, Theodosius. Sir T. D. Forsyth, *J.R.A.S.* 47, p. 12; Prof. P. Gardner, *Num. Chron* 1879, 271; Dr. A. F. R. Hoernle, 'Indo-Chinese coins in the British collection of Central Asian Antiquities,' *Ind. Ant.* 1899, p. 46; also *J.A.S.B.* 1899, vol. 68, part 1; the 'iron' coins are really of copper. As to the seals from Khotan, see note 91.

¹²¹ Gold currency in Keping, in the time of Tchang K'ien; on one side a man on horseback, on the other a man's face; Wylie, 34. Not a very good description of Eukratides's money, but it does not appear to what else it can refer.

route by means of native agents,¹²² which is perhaps in favour of the Iranians having previous knowledge of it; but such knowledge could well have been acquired since 140 B.C. Of articles of trade, much the most important would be silk, and silk unfortunately furnishes no assistance, as there appears to be a direct contradiction in the two Chinese accounts. According to Sze-ma-t'seen, the people from Ta-yuan westward as far as Parthia 'were not in the habit of using silk fabrics.'¹²³ According to the Annals of the Han 'silk and varnish are used all over the country.'¹²⁴ Both passages occur in exactly the same context, which appears to be part of Tchang K'ien's report. I may remark that, if the latter passage be the correct version, the Chinese trade for a period considerably anterior to Tchang K'ien would be *proved*, as neither silk nor lac could be produced elsewhere; but if the former be correct, it would not necessarily be *disproved*, for Tchang K'ien may be writing only of the common people of a country out of which the ruling caste had been driven, and people may also trade in a luxury that they do not use themselves. Here it must remain, until some Chinese scholar resolves the difficulty.

In later times furs and iron are mentioned as notable objects of Seric trade.¹²⁵ There is a square bronze coin of Philoxenos in the British Museum, of which the figure on the obverse is described by Cunningham as Apollo radiate, clad in skins,¹²⁶ a description which recalls the description of the furs on the radiate figure of Anaitis at Bactra.¹²⁷ Even however if the dress be meant for furs, they may have come from the north. The Seric iron, which was described as the best, is supposed to have included cast iron; and according to the Annals of the Han,¹²⁸ the countries of the west learnt the art of casting iron from a Chinese envoy who lost his troops and gave himself up. Trade in iron, however, is not referred to, though the importation of gold and silver from China is mentioned.

The celebrated metal mirrors covered with designs in clusters of grapes,¹²⁹ and with representations of panthers and other animals, that were imported into China under the Han dynasty, do not furnish any assistance, as their first appearance in China can be dated to the reign of Woo-te. The same consideration applies to Woo-te's reorganisation of the mint, which has been dated to 116 B.C., if indeed the idea was derived from a Greek source.¹³⁰

There remains the fact that some of the Bactrian kings struck coins of nickel, and as this was known early in China, it probably points to trade communication. Nickel coins are known of Euthydemus II, Pantaleon and Agathokles, that is to say, well within the first half of the second century B.C.

Some traffic there must have been over this route from time immemorial;¹³¹

¹²² Ptolemy, 1, 11, § 7 (from Marinus).

¹²³ Kingsmill, 94.

¹²⁴ Wylie, 46.

¹²⁵ Pliny, *N.H.* 34, 14, § 145; Periplus, § 39.

¹²⁶ Cunningham in *Nun. Chron.* IX, 298. But the description given by Prof. P. Gardner (*P.G.* 57) is 'clad in chiton, himation and boots.' The boots are plain; but it does not clearly appear on the plate what the garment is.

¹²⁷ See note 13.

¹²⁸ Wylie, 46.

¹²⁹ Figured and described by Dr. Hirth, *Ueber fremde Einflüsse, &c.*

¹³⁰ De Lacouperie, *Western Origin, &c.*, p. 217, note 933.

¹³¹ More will be known about this if chemical analysis should ever prove that the jade objects found, e.g. in Assyria, must be Khotan jade.

but on the above facts it appears to me that, as regards any bulk of trade with China prior to the reign of Woo-te, it is for the present a case of not proven, though probable. A fact however like the enormous number and wide circulation of the coins of Menander, whose date has been put at about 140 B.C., would coincide very well with an outburst of commercial activity at that date, connected so far as the Indo-Greeks were concerned with the conquests of that monarch.¹³²

The considerable conquests made by the Bactrians must, however, in such a state, presuppose considerable wealth, even if carried out altogether by the troops of the state, and not, as is probable when the analogy of any other Hellenistic kingdom be considered, by mercenaries, possibly including nomads. Apollodoros in express terms attributes the power and conquests of the Bactrians to the natural fertility and resources of the country.¹³³ But I think that the general experience of the world shows that, whatever might be true of a peasant state, a state of the Hellenistic type could only acquire sufficient wealth in two ways, by commerce or by mines, which in the ancient world must mean gold. Even without a trade with China, the internal and the Indian trade might yield a large revenue; and Tchang K'ien attests the facts of a large commerce and of the ability of the people to conduct it. But it also appears probable that, until after the reign of Eukratides, they had access to a considerable supply of gold; indeed Eukratides struck the largest known Greek gold coin. As neither the Indo-Greek nor the Saka kings coined gold, and the Kushans coined imported Roman gold, it is clear that the gold of the Bactrian kings was not derived from India, and this suggests that the 'ant-gold' of Dardistan was not of the importance sometimes assigned to it, especially if Tchang K'ien is to be understood as meaning that the Bactrians were in his time driven to importing gold from China.¹³⁴ The inference must be, that until the reign of Eukratides they were in a position to tap the Central Asian supply from the Altai, from which came the great wealth of gold enjoyed by Panticapaeum.¹³⁵ The great movement of tribes which was initiated by the conquests of the Huns, and which ended in the defeated Yue-tche being precipitated on to the Sakas, and in both nations successively being driven on to the Bactrians, must have cut off the supply, which was never renewed. That the gold coinage stopped owing to a scarcity of gold is suggested by this, that the silver coins of the sixteen kings after

¹³² Alexander-legends attach themselves along this trade route to places where Alexander certainly never was, and are not all due to Islam; e.g. the story of the foundation of Taugast and Chubdan, given by Theophylact, is prae-Mahommedan. But even if they in fact referred to the Graeco-Bactrian kings, they cannot be dated, and so would be of little value for the present subject.

¹³³ Strabo, II, 516. He calls it the greatest ornament of Iran (τῆς συμπαράς Ἀριανῆς πρῶσχημα), and says the Greeks made their

conquests by growing strong διὰ τὴν ἀρετὴν τῆς χάρας. It was πᾶμφορος πλὴν ἐλαίου: which is borne out by Sze-ma-ts'een, with a natural alteration of the important thing missing: Kingsmill, 94, 'Their country produced everything but silk and varnish' (lac).

¹³⁴ Wylie, 46, 'They applied the Chinese gold and silver to make vessels, instead of using them for state presents'; Kingsmill, 94, 'They obtained from China gold and silver surreptitiously to make various utensils.'

¹³⁵ Head, *Hist. Num.* pp. 238, 239.

Eukratides became heavier, showing that gold at once began to rise in price.¹³⁶

IV.

One further point arises, from a consideration of the great extension of influence, measured by distance, which these kings are said to have achieved. We are dealing with pioneers; and when it is considered that, besides Bactria, they ruled at different times Afghanistan, Merv, Bokhara, Khokand, the Cabul valley, and the Punjâb,—that they carried their arms south to the mouths of the Indus, east as far as Chinese Turkestan and the Huns,¹³⁷ that they besieged Oude, reached the Jumna, perhaps the Ganges itself,¹³⁸ and proverbially overthrew more tribes than even Alexander,—then it becomes clear that to do all this with the force at their disposal, (even supposing that some of their 'conquests' meant little), little time or energy can have been left for such things as art, science and literature. In a new country (and such the East was to the Greeks) men turn to practical matters; it is not unfair to suppose that every European was needed as a fighter or a governor.¹³⁹ The only two things likely to attract a man to the far East would be wealth and power, *i.e.* commerce and fighting; and these are just the two things most certain. The chief impression that they left on the Indian mind was, that they fought: while the statement of the Indian that among the Yavanas slaves could rise to be masters, and the brief duration of dynasties in Bactria, point to a society of adventurers.¹⁴⁰ On the other hand, neither Bactria nor India has yet furnished a single Greek inscription: the edicts of Asoka recall nothing that is Greek, though they do somewhat follow the inscriptions of Darius. Strabo has gone for his information about the Eastern Greeks, not to any writer of their own, but to Apollodoros of Artemita in Parthia.¹⁴¹ The one bit of information remaining about men of learning tends to show that they did not go to India, even when communication was easy¹⁴²; the rise of Parthia, if it did not cut communication entirely, must certainly have made it more difficult.

This might be followed out at some length; but it is probably correct to conclude that no one would ever have supposed that from the Bactrian

¹³⁶ Cunningham's deduction. *Num. Chron.*, 1888, p. 217.

¹³⁷ Apoll. ap. Strab. 11, 516 μέχρι Σηρῶν καὶ Φρυγῶν. Tomaschek, *Ueber das Arin. Gedicht* before cited, p. 769 reads Φόυννοι = Χόυννοι of Marinus = Ὀυννοι of Cosmas = Arimaspi = Huns.

¹³⁸ Cunningham in *Num. Chron.* 10, 224 seq.: Levi, *Quid de Graecis*, 15-17.

¹³⁹ Analogies drawn from Anglo-Indian life seem to me most misleading. It might be more in point to compare the history of the Portuguese in the Indian Ocean, more especially

their later prazo system in South-East Africa.

¹⁴⁰ Of the founders of new dynasties, Euthydemos certainly (Polyb. 11, 34), and Eukratides probably (p. 271), came from the west, and perhaps represented two movements of new settlers or mercenaries.

¹⁴¹ As to his dependence on Parthian (and Roman) sources of information, see 1, 14; 2, 118; 11, 508.

¹⁴² Vindusata's request for a sophist, which Antiochos put off with a jest; probably none would go. (Hegesandros ap. Ath. 652 f.)

Greeks India could have learnt philosophy or science, (possibly art should be included), had it not been for the coins. And in a way the coins prove too much; the realistic portraiture is too far in advance of the moneys of Egypt or Syria; individual genius must here have played its part, stimulated perhaps, even if unconsciously, by contact with those whom even the Greek acknowledged as the best of all 'barbarians.'¹⁴³ The very novelty and variety of the coin types prove the numerous influences here at work which had no counterpart in Syria or Egypt,¹⁴⁴ more particularly in the sphere of religious cults, the sphere in which, if at all, the point of contact between the Greek mind and the Buddhist would, under the circumstances, have to be sought. The meeting of Buddhism with Dionysos-worship might have been of supreme interest.¹⁴⁵

In conclusion, it may be worth while to turn for a moment to a sketch of what even a pure Greek community might become, when isolated among Scythians; I mean the Borysthenitica of Dio Chrysostom.¹⁴⁶ The city had shrunk to half its former circuit; the temple statues were in ruins; the men, already speaking Greek imperfectly, were in Scythian dress, fighting the Scythian day and night, and clinging to their one book, Homer, as the last tie with the mother country. The rare traders who came from Greece were quite illiterate men; the arrival of one who had any tincture of philosophy was a world's wonder. And this was a town, not in Central Asia, but in Europe; not inland, but on the sea. The Scythian dress, the imperfect speech, the total absence of strangers of any culture, the survival of Homer alone,—these make up a picture of which the general lines are more likely to be true of communities such as the Greeks of the far East than any sketch based upon the false analogy of Anglo-Indian life. If Apollodoros may be trusted, these Greeks expended their utmost strength in pushing down from the Oxus to the sea; once again cut off from salt water, they were swallowed up by the peoples about them as a desert stream is swallowed in the sand.

W. W. TARN.

¹⁴³ Strabo, I, 66. The same feeling seems to underlie all Alexander's dealings with India, and was well expressed by the mediaeval romance writer who made of Alexander and Poros, two knights tilting in the ring.

¹⁴⁴ Cf. Cunningham in *Num. Chron.* IX. 293.

¹⁴⁵ Cf. Oldenberg's most interesting parallel

between Orphism and Buddhism, *Aus Indien und Iran*, pp. 85 to 100.

¹⁴⁶ A curious similarity may be noted here. King Paerisades at Panticapaeum had to bring up a Scythian prince as his heir (Holm. 4, 532, Eng. Tr.); while their joint coins show that Kadphises succeeded Hermalos peacefully.

SOME OBSERVATIONS ON THE PERSIAN WARS.¹

2. *The Campaign of Xerxes.*

THE defeat at Marathon made it doubly necessary for the Persian government to undertake the subjugation of the Greeks across the sea. If there was ever to be peace on the Aegean that 'Majuba' must be 'wiped off the slate.'

This time there was to be no mistake. The expedition was long and carefully prepared, and was planned on an enormous scale. The number of Xerxes' host cannot indeed be demonstrated, but it may be estimated with some probability, and the historian is bound to attempt an estimate. No sane critic could accept the millions of Herodotus. Nor would many now be found to admit the 700,000 or 800,000 given with or without garniture by Isocrates, Ctesias, and the later authors who mostly depend upon Ephorus. These figures seem to have been deduced from Herodotus. In iv. 87, the land forces led by Darius against the Scyths are said to have numbered 700,000, and it is implied that they were the full levy of the entire empire. In viii. 100 and 113, Mardonius is to be left with 300,000, while Xerxes goes home with the *larger part* of the army (cf. Thuc. i. 73). In vii. 20, Xerxes' host is larger than that of Darius or any other on record. This last passage may account for the addition of 100,000 by those critics who remembered it, and cavalry, auxiliaries, and marines could always be added according to taste, although the original purpose was of course to reduce Herodotus' total to more reasonable figures. But what is the value of the number 700,000 in Herodotus, iv. 87? The pillars set up by Darius on the Bosphorus recorded *ἔθνεα πάντα ὅσα περ ἦγε· ἦγε δὲ πάντα τῶν ἡρξε*. Did they record anything more, and if so could Herodotus read it? The one stone rejected of the builders was covered with 'Assyrian' letters, but was the Greek inscription, built into the altar of Artemis, exposed to view? Herodotus in his account of Xerxes' army is obviously drawing on some official document or monument, but he cannot tell the number of the several national contingents, and his total does not appear to be derived directly from his authority. Was

¹ Continued from Vol. xix. (1899), p. 197. The present article has been delayed by press of other work. Meanwhile Ed. Meyer has published his *Forschungen*, vol. ii. and *Gesch. des Alterthums*, vol. iii. which partly anticipate

what I meant to say, but save me the trouble of labouring certain points. I have also the benefit of my friend Mr. G. B. Grundy's elucidations, especially of Thermopylae, in his *Great Persian War*.

Darius more explicit? Herodotus tells us details about the army of Xerxes which give us some clue to the method whereby he probably arrived at his figures, but he furnishes no particulars about the army of Darius. To argue from the latter to the former is to explain *obscurum per obscurius*. And after all the number 700,000 is as monstrous and contrary to common sense in the one case as in the other!

Another estimate has been based on the 300,000 left with Mardonius. If 300,000 were deemed enough to conquer Greece, is it credible that more were ever sent? If Artabazus with 60,000 men escorted Xerxes homewards, is it credible that the king had any very large force with him? So the whole original force cannot have been much above 300,000. But even 300,000 are too many to be probable in view of the difficulty of transport and supply, the length of the campaign, the character of the country, and the limited opposition to be expected. And the number 300,000 is no better supported than the rest. Some of the most recent historians therefore have entirely given up Herodotus and calculated Xerxes' army simply by *a priori* probabilities. I do not think the problem is quite so desperate. We may not accept Herodotus' figures, but they are not mere arbitrary inventions, and we have to reckon with them. Of the discussions which I have read M. Hauvette's seems to me to come nearest to a right method.

We may here leave out of account the forces serving on the fleet, the contingents supposed to have been picked up on the road through Thrace, Macedon, and Thessaly, and the non-combatants and camp followers. For their numbers Herodotus expressly says that he relies upon conjecture, and the exaggeration is patent. All the more does his catalogue of the regular army (vii. 60 *sqq.*) deserve attention. The descriptions of the costumes and accoutrements may be drawn from Mandrocles' picture in the Heraeum at Samos (Hdt. iv. 88). But the list of forty-six nations² distributed into twenty-nine groups, each group under its own ἀρχων, who is named and specified, is clearly official. It is also clear that, whether the twenty-nine groups correspond to the provinces or not, the list represents the military organization of the whole Persian empire. Herodotus, and doubtless the Greeks in general, had an unquestioning belief that Xerxes brought against Hellas every people, nation, and language, whom he ruled (Hdt. vii. 21, 56: Aesch. *Pers.* 12, 712). It would never occur to Herodotus or any one else that he was guilty of the least inaccuracy if he transcribed a Persian 'Army List' of the period as a true enumeration of Xerxes' host. We need not believe that his catalogue was derived from any record of the review at Doriscus, or gives an official account of the troops there present.

Herodotus puts the total of the land force brought from Asia at 1,800,000 (vii. 60, 87, 184). He reckons 1,700,000 to the infantry, 80,000 to the cavalry, and 20,000 to the camel and chariot corps. I interpret this reckoning to mean that he started with a total of 1,800,000, *estimated* the 'mounted' troops at 100,000, and set down the remainder as infantry. The story of the

² For the number cf. Hdt. ix. 27 and vii. 76 with Stein's note

packed enclosure, which covers the calculation, cannot be taken seriously. How then did Herodotus arrive at his total? His official catalogue appears to have been something like the Byzantine military lists. It gave the names of the ἄρχοντες and of the contingents under the command of each, but no numbers (vii. 60). Herodotus must, I think, have got his 1,800,000 from his conception of the Persian military organization, that is to say, from the number of the ἄρχοντες, and the number of the troops which he imagined each ἄρχων to have commanded. He mentions twenty-nine ἄρχοντες, but so awkward a number could hardly be chosen as the basis of any conceivable scheme of organization. We might almost have conjectured a thirtieth *a priori*, had not the inclusion of the Immortals in the total, and the pointed way in which Herodotus introduces them at the end of his list, of itself suggested that Hydarnes, the Captain of the Guard, is to be added to the other twenty-nine. The army was organized on a decimal system. Herodotus mentions decarchs, hecatontarchs, chiliarchs, and myriarchs, above whom come the ἄρχοντες and the six generals-in-chief. We might expect the next grade above the myriarchs to be captains of 100,000, and so the author of the epitaph at Thermopylae interpreted the thirty ἄρχοντες, when he wrote *μυριάσιν ποτὲ τῇδε τριηκοσίαις ἐμάχοντο*. But Herodotus would make the ἄρχοντες captains of 60,000, and this number is supported by several examples and analogies in the Persian organization. The corps under Artabazus (Hdt. viii. 126), and the land force at Mycale under Tigranes (ix. 96), were 60,000 strong; Cyrus, when he dispersed the river Gyndes (i. 189), is said to have broken up his army into 360 divisions; the normal number of the Persian fleet is 600 ships (iv. 87, vi. 9, vi. 95); and there were *six* generals-in-chief over Xerxes' host. Herodotus is probably right in setting over the myriarchs commanders of 60,000. The regular strength of a Persian army corps probably *was* 60,000. But is Herodotus right in making his thirty ἄρχοντες into commanders of army corps? Hydarnes commanded the Immortals, and they were only 10,000. If we are right in putting Hydarnes among the ἄρχοντες, there is a presumption that the other twenty-nine were also myriarchs. Herodotus describes the numbering of the host by myriads, and throughout his account assumes the myriad to be the unit of measurement. We naturally expect to find that the same unit underlies the list of ἄρχοντες, that each name corresponds to a myriad. The number of troops left with Mardonius, which Herodotus must have derived from another source, seems to confirm this conjecture—300,000 = 30 × 10,000. Not much stress perhaps can be laid on the evidence of Aeschylus in such a matter, but, such as it is, it goes to support our theory, *e.g.* *Pers.* 302 *μυρίας ἵππων βραβεύς*, 314 *μυριόνταρχος*, 980 *μυρία μυρία πεμπαστάν*, 993 *μυριοτάγον*. Herodotus in fact seems to have promoted his ἄρχοντες a step too high.³ It was not they, but the six generals over them, who were commanders of 60,000. If so, the whole army must have numbered 360,000, which agrees very well

³ I gather from M. Hauvette's remarks, the ἄρχοντες myriarchs, but I have not seen *Hérodote*, p. 310, that M. de Gobineau makes his *Histoire des Perses*.

with the story of Cyrus on the Gyndes, and with the force assigned to Mardonius, which was arrived at, I believe, by deducting the corps which fought at Mycale under Tigranes— $360,000 - 60,000 = 300,000$. But thirty myriads are not 360,000, but only 300,000. The additional 60,000 must be the cavalry and other mounted troops. Probably each army corps consisted of 50,000 infantry and 10,000 cavalry (or their equivalent). Herodotus sets his thirty ἄρχοντες in command of infantry only. We may assume six more myriarchs for the cavalry. It is true that Herodotus has involved himself in an obvious inconsistency. He includes the cavalry in his total of 1,800,000, which (if our hypothesis is right) he deduced from his thirty ἄρχοντες. But he nevertheless regards these officers as commanding nothing but infantry. The root of the inconsistency lies no doubt in his mistake as to the grade of the ἄρχοντες—as myriarchs they are really infantry leaders and parallel to the hipparchs, but as commanders of army corps, according to Herodotus' conception, they would each have a cavalry division under him. (The position of Hydarnes is of course even more hopelessly inconsistent.) In the words with which he introduces his account of the cavalry, Herodotus seems to imply that each ἄρχων would have had his cavalry division, if all the cavalry had taken part in this campaign—*ἵππεύει δὲ ταῦτα τὰ ἔθνη· πλὴν οὐ πάντα παρείχeto ἵππον ἀλλὰ τοσούδε μούνα*. Does he then give us the whole of the actually existent Persian cavalry under the impression that it is a fraction of his imaginary Persian cavalry? Does he, in other words, quote all the cavalry divisions that he found on his official list? No, he mentions only three hipparchs, whereas there ought (we maintain) to have been six. It appears to be a genuine historical fact that only part of the cavalry went on the campaign, and Herodotus must owe his knowledge of it and of the three hipparchs to some special source of information, the same doubtless whence he derived the story of the accident to Pharnuches at Sardis (vii. 88). The mounted contingents which he mentions are presumably those which he found in his list under the command of these three hipparchs. They ought on our scheme to number 30,000.⁴ Herodotus estimates them at 100,000, but it is evident how he gets his figures. Two of the eleven contingents (the Indians and Libyans) form the chariot corps, one (the Arabs) the camel corps, and there are eight cavalry contingents.⁵ Herodotus reckons each of these divisions at a myriad. It is only an apparent exception that he assigns 8,000 to the Sagartians (the only number he gives for any single

⁴ Cf. Aeschylus, *Pers.* 315. ἵππον μελαίνης ἡγεμῶν τρισμυρίας. It is true that in the preceding line this officer was only μυριόνταρχος, which is probably nearer the fact, but '30,000 horse' may have implied to Aeschylus 'all Xerxes' cavalry.' What does μελαίνης mean? Were the horsemen black-capped and black-coated, like Circassian irregulars, or did the Persians share the Turkish preference for black chargers?

⁵ There is a flaw in the text of Herodotus,

vii. 86. The word Κάσπιοι occurs twice. I would read Σάκαι for the first, because (1) the Sakae specially distinguished themselves among the Persian cavalry at Plataea (ix. 71), but are not mentioned here; (2) their infantry was brigaded with the Bactrians (vii. 61); (3) ΚΑΙΣΑΚΑΙ might easily be corrupted into ΚΑΣΠΙΟΙ through reduplication of ΚΑΙ and the proximity of ΚΑΣΠΙΟΙ two lines lower down.

contingent in his whole list), for he brigades them with the Persians (*ἐπετε-τάχαστο ἐς τοὺς Πέρσας*, vii. 86), and he has already mentioned 12,000 Persian cavalry (vii. 40-1), so that the Persians and Sagartians together make up two myriads. The arbitrariness of his estimate is patent throughout, but particularly in the case of the camel and chariot corps (vii. 87, 184).

We have thus arrived at the following scheme of the Persian army 'on paper'—six army corps, each consisting of six divisions of 10,000 men, one being a cavalry division: six generals-in-chief, and thirty-six myriarchs, of whom six were hipparchs. But was this the army which Xerxes led across the Hellespont? No, there are several indications that Xerxes had with him only *three* army corps. We have already seen that there were only three hipparchs. The army marches through Thrace in three divisions. In the course of the war only three separate commands can be detected: Mardonius, Artabazus, and Tigranes, of whom the two latter are expressly said to have had 60,000 men under their orders. Herodotus of course sends all six generals on the campaign. Even their presence would not prove that there were more than three army corps, for it appears to have been a not uncommon practice to divide the command (*e.g.* Datis and Artaphrenes, Artayntes and Ithamitres), and the way in which Herodotus couples them on the march through Thrace suggests joint command (vii. 121). But perhaps he simply took them from his list. Was that list quite up to date? It is a little suspicious that so many prominent officers hold quite different positions in the subsequent narrative.⁶ Artabazus and Tigranes, simple *ἀρχοντες* at Doriscus, reappear in command of army corps; was it their cases that led Herodotus to assign 60,000 men to each *ἀρχον*? Masistius commands not infantry but cavalry; had he succeeded Pharnuches? Mardontes seems to be in command of the marines at Samos and Mycale. Masistes might no doubt be absent from his Bactrian satrapy, but could Artayctes be spared from Sestos? On the other hand, were Darius' sons, Abrocomes and Hyperanthes (vii. 224), without high military rank? Be that as it may, the three army corps best suit the conditions and course of the campaign. After the battle of Salamis Mardonius remains in Greece with one, Xerxes takes back one (which afterwards fought at Mycale) to keep down Ionia, Artabazus with the third guards the communications in Thrace, and in the next summer marches to reinforce Mardonius in Boeotia. 180,000 men is not an incredible number even for a campaign in Greece, if we consider the preparations, but is large enough to account for the impression made on the minds of the Greeks, who had never seen the like before.

Xerxes' fleet is no less difficult to estimate, and we find fewer data to help us in Herodotus. Here, too, we must distinguish between the names and the numbers. It is likely enough that the catalogue of nations and list of admirals has an official source, perhaps the same document as the army list. But the example of the army does not encourage implicit faith in Herodotus'

⁶ It is unfortunate that Aeschylus is useless as evidence on this point. He appears to be content with any Persian name that will fit his verse.

enumeration. Were all the contingents present? and how does Herodotus get his numbers? All the contingents, or members of them (the Lycian might be an exception but for Kyberniscus), are incidentally mentioned again, and two of the four admirals, Ariabignes and Achaemenes, reappear in the story. On the other hand, it seems clear that Herodotus took his total of 1,207 triremes from Aeschylus, who perhaps meant no more than a poet's 'thousand,' although he spoke ambiguously and must have had some reason for noting the 207 fast sailers among them.⁷ Herodotus distributes the 1,207 among the nations, on what principle we cannot say. It is likely that he had special information on some details, *e.g.* the twelve Paphian vessels and the five led by Artemisia, but it is also likely that conjectural probability had its part in the calculation. It is suspicious that whereas the Greek contingents account for 307 ships, the Barbarian add up to exactly 900, and that the Dorian hexapolis furnishes just six times Artemisia's squadron. Diodorus (xi. 3) has practically the same totals (rounding 1,207 to 1,200, and 307 to 310), but considerable variations in the items. Evidently we can lay little stress on either the individual numbers or the total. Can the latter be to any extent controlled? In the first place, the Persian fleet at Salamis cannot be put above about 600 ships, for (1) the Greek fleet according to Aeschylus numbered 310, and Achaemenes implies (Hdt. vii. 236) that the Persians had about 300 more, (2) only 300 reappear at Mycale, (3) the strategy would have been different had the Persian superiority been greater. Secondly 400 ships are said to have perished in the storm at the Sepiad strand, and the 200 sent round Euboea are also said to have been annihilated. But these figures, although they cannot be checked, are probably gross exaggerations. Two naively contrary aims influence Herodotus. He starts from his Aeschylean figure 1,207, and first reduces it by divine assistance (viii. 13) to something like the number which really fought at Salamis ($1,207 - 600 = 607$).⁸ But when he comes to that battle he is once more confronted with his old total, for Aeschylus speaks of the fleet at Salamis. So he restores the fleet to its original strength by the monstrous supposition that the reinforcements from the islands balanced the losses.⁹ Probably, however, the losses did not exceed 200 or 300 (*cf.* Diod. xi. 12), and the original fleet therefore 800 or 900. Thirdly, another calculation confirms this estimate. Achaemenes was in command of the Egyptian contingent, 200 strong. Ariabignes commanded the Carian and Ionian squadrons, and probably also the Dorian which stands next them in the list and is naturally connected with them. These three squadrons would amount

⁷ *Persae*, 341-13.

Ἑρέσῃ δὲ καὶ γὰρ οἶδα, χιλιάς μὲν ἦν
ὧν ἦγε πλῆθος, αἱ δ' ὑπέκροισι τάχει
ἐκατὸν δις ἦσαν ἐπτά θ'. ὧδ' ἔχει λόγος.

⁸ Strictly perhaps one ought to say he starts with 1327, for he has added 120 from the Greek cities of Thrace (vii. 185), but what few ships may really have come from them (*e.g.* from Samothrace, viii. 90) are probably already

included in the Hellespontine contingent, and I do not believe that Herodotus pays any further heed to them in his reckonings. The total losses in the battles at Artemisium cannot be determined.

⁹ I observe that Ed. Meyer has made this point, *Gesch. d. Alt.* iii. § 217. *cf.* also A. Bauer in vol. iv. of *Jahreshefte des Österr. arch. Inst.* pp. 93-4.

on Herodotus' figures to 200 ships. If we may assume that the other two admirals commanded divisions equal to these, we get a total of 800, which would fit the other indications very well. We cannot on the evidence attain to more than a rough estimate.

The route chosen for the invasion was a reversion to Mardonius' plan. It indicates the purpose of a systematic conquest of Greece, and marks the progress of Persian policy since Marathon. It also enabled the invader to bring a larger land force to bear. I do not propose to discuss Xerxes' route in detail, but after travelling along the Thracian coast in 1896 with Prof. W. C. F. Anderson, I am inclined to agree with his theory (v. 'A Journey from Mount Athos to the Hebrus' in the Commemoration Volume of Firth College, Sheffield, 1898, pp. 211-52) that the right wing marched from Doriscus up the Hebrus and down the Axios to Therma, while the centre and left wing kept together as far as the Symbolon pass between Neapolis and the plain of Philippi,¹⁰ and there diverged, the left wing gaining Therma by the road south of Pangaeus, through Amphipolis, along the coast, and past Lake Bolbe, the centre by the road north of Pangaeus and through Seres. Xerxes with his guard may have made an excursion to Acanthus to see the canal, but no large division can have crossed the ridge of Chalcidice. The account in Herodotus is considerably confused through ignorance of the geography.

What was the attitude of the Greeks towards the coming invasion? The league against the Mede consisted mainly of Sparta and her allies and their allies. If other states joined them it was for the most part rather out of enmity to neighbours than from enthusiasm for the cause. Sparta was not likely to surrender her hard-won headship to a foreign suzerain without a struggle. She was bound to lead the national resistance, and she stood to win as well as to lose, for the states which still withstood her pretensions in continental Greece would either be driven to accept her supremacy, as Athens had already been driven, or be left at her mercy if she emerged victorious from the battle. Athens was of course irrevocably committed. For her the war was a question of life or death. A mutual need bound these two allies to one another. The isthmus might be defended; but without the Athenians the fleet could not face the Persian armada, and 'wide doors were open into the Peloponnese' (Hdt. ix. 9). That fact was not indeed, as the Athenians, forgetful of Marathon, pretended (Hdt. vii. 139), necessarily fatal to the defence, but it was doubly dangerous in view of the attitude of Argos, which gave the enemy a foothold and an ally within the 'island.' Moreover, the security of the Peloponnese could not of course be permanent if the Persians retained command of the sea. Athens was even more dependent on Sparta than Sparta on Athens. Thanks to Themistocles she had a fleet rivalled by none save Gelo's in the Greek world, but alone it could no more face the Persian navy than could the Peloponnesian. On land she was un-

¹⁰ The line followed by the new railway from Xanthi to Drama by the gorge of the Nestus is a fine piece of engineering only opened up by blasting. It was not a practicable road.

sheltered by the isthmus and helpless against the myriads of Xerxes. It was natural and inevitable that, if it came to making sacrifices, Athens should have to pay a heavier ransom than Sparta. Fortunately she was guided at this crisis by the greatest of her statesmen.

Themistocles stood upon the shoulders of Pisistratus. His mental horizon was immensely wider than the parochial politics of the City-state. It is almost as ludicrous to see in his creation of the Athenian navy no more than a provision against the coming invasion, as to accept the childish detraction which affected to see in it no more than an effort to finish the war with Aegina (Hdt. vii. 144, Thuc. i. 14). *Τὴν ἀρχὴν εὐθὺς ξυγκατεσκεύαζε* (Thuc. i. 93). Of the old prosperous Eretrian league Sybaris was gone. Miletus ruined, Eretria ruined. What an inheritance might fall to Athens if she could survive to grasp it! Doubtless there was Corinth to be reckoned with when it came to the west, but once mistress of an eastern empire Athens need not fear to confront any opposition that the Peloponnese might offer. But Themistocles never let visions of the future or prejudices of the past obscure his view of a present situation. For the moment the Persian peril made it necessary to postpone these ambitions. The Athenians must subordinate their separate interests to the general safety in which their own was included. After the war would be time enough to resume their independent action.¹¹

That Themistocles succeeded in carrying through his policy is creditable both to him and to the Athenians. He had already persuaded them to forgo their private profit from the mines in order to build the fleet. He now persuaded them to forgo the triumph over Aegina which that fleet put in their power, to place their new navy under the orders of a Spartan admiral who brought only ten ships, to commit their destiny to the wooden wall, abandoning country and city to the enemy, and, not least hard, to lay aside all feuds and factions among themselves. In this reconciliation Themistocles himself led the way. Mindful of the danger, which had shown itself at Marathon, of intrigue between a party at home and *émigrés* in the enemy's camp,¹² he recalled among other exiles Aristides and Xanthippus. The terms of the compact may be inferred from the facts that Aristides commands the Athenian contingent at Plataea, and Xanthippus the Athenian squadron at Mycale.

The allies endeavoured to enlist other states in support of their cause but with little success. From outer Hellas help was not forthcoming. The eastern Greeks were already subjugated, or shut off in the Euxine. The western Greeks, surely by no mere coincidence, had enough to do to maintain their own freedom against Carthage. Only one ship came to the rescue across the Adriatic. Crete sympathised rather with the Dorians in Asia than with the Dorians of the Peloponnese. Even in Greece proper, which was

¹¹ Cf. Hdt. viii. 2, which may be coloured by afterthought so far as 'hegemony' is concerned v. Ed. Meyer. *Forsch.* ii. pp. 218-9), but has probably some foundation in fact, and certainly

is dramatically true to the situation. Cf. Plut. *Them.* 7.

¹² Cf. *Ath. Pol.* 22, Plut. *Them.* 11, and *Arist.* 8.

directly menaced by the invasion, the allies met with little encouragement: Corcyra despatched sixty ships, but the north-west as a whole, save where Corinthian influence was dominant, kept aloof; and the Achaeans held with it. The peoples represented on the Amphictyonic council mostly submitted to Xerxes, and the Delphic God approved their attitude. The Thessalians, the Boeotians (except the Thespians and Plataeans), and the Argives medized outright.¹³ No doubt the prospects of the defence were not hopeful, and the example of Ionia was deterrent; no doubt the Persian yoke was easy, and some might even gain by it; but the really influential consideration was, I am convinced, distrust of Sparta and her allies (cf. *Thuc.* v. 27 and 29). Most Greeks, if they could not be independent, preferred a suzerain in Mesopotamia to one at their own doors, a foreign master to one of themselves. The combination of Sparta, Athens, and Corinth appeared to them to be more dangerous to their autonomy than Xerxes and all his men.

This jealous suspicion must have been particularly strong in the Thessalians, Thebans, and Argives. These three states had all been allied with the Athenian tyrants in their anti-Spartan days, and all three were to give Sparta trouble in the future. The two former were powerful non-Dorian communities which withstood her influence in northern and central Greece. Argos was her implacable rival in the Peloponnese. The Argives could never forget Agamemnon and Pheidon and their lost hegemony. They were still smarting from the thrashing administered by Cleomenes. Sparta had nothing to expect from them but hostility.¹⁴ The negotiation recounted by Herodotus (vii. 148-9) is a pretty piece of Greek diplomacy—the Argives try to entrap the Spartans into an admission of their pretensions, or at least of their equality—but it can only have served to justify their assumed neutrality, and the retort with which the story ends neatly expresses the whole situation: οὕτω δὲ οἱ Ἀργεῖοι φασὶ οὐκ ἀνασχέσθαι τῶν Σπαρτηγέων τὴν πλεονεξίην, ἀλλ' ἐλέσθαι μᾶλλον ὑπὸ τῶν βαρβάρων ἄρχεσθαι ἢ τι ὑπέξει Λακεδαιμονίοισι. The very different measure dealt by Herodotus to the Argives on the one hand and the Thebans on the other reflects the different feeling about them in Athens at the time at which he wrote. He had the better chance of persuading his hearers of Argive neutrality, because they had for twenty years been accustomed to think of Argos as neutral, and in the case of Athenians benevolently neutral. But his tenderness for Argos is particularly unfortunate, because it has the effect of falsifying the whole perspective of the campaign. Yet he lets the truth be easily discerned under the cloak of words (vii. 148-52, viii. 73), and at last it leaps into view in the message to Mardonius (ix. 12), Μαρδόνιε, ἐπεμψάν με Ἀργεῖοι φράσσοντά τοι ὅτι ἐκ Λακεδαιμονος ἐξελήλυθε ἡ νεότης, καὶ ὡς οὐ δυνατοὶ αὐτὴν ἔχειν εἰσὶ Ἀργεῖοι μὴ οὐκ ἐξιέναι. The Argives, in fact, until the battle of Salamis, and the failure of Mardonius to

¹³ Ed. Meyer. *Forsch.* ii. pp. 210-17, has nearly expressed my view of the attitude of these states and Herodotus' treatment of them. As regards Argos Grote had already led the way, third ed. vol. v. pp. 88-90.

¹⁴ In logical parlance the opposition between Sparta and Argos, like the later opposition between Athens and Corinth, was *contradictory*, whereas the opposition between Sparta and Athens was merely *contrary* (cf. *Thuc.* v. 91.

make a breach in the defence by detaching the Athenians from the alliance, had entirely altered the situation, were performing for Xerxes the same service that they afterwards rendered to Athens during the Sicilian expedition—they neutralised the offensive power of Sparta and confined her effective action to the Peloponnese. The reproaches of selfishness and indifference so freely levelled by the Athenians at Sparta may have been natural at the time, and furnished a favourite rhetorical foil to the sacrifices so nobly borne by Athens, and a welcome retort to the taunts of her enemies after she had made peace with Persia in order to enslave the Hellenes, but they are unfair and ungenerous, and have propagated an injustice as black as any to be found even in Greek history. The Spartans simply could not march in force north of the isthmus lest the Argives should make a flank attack upon Laconia and raise Helots and Arcadians in revolt.¹⁵

Another consideration led to the same conclusion. Even apart from the danger from Argos the Spartans could not have ventured beyond the isthmus without imperilling the safety of Greece. An army of about 100,000 men and a fleet of about 400 ships was the utmost that the allies could muster, and it is doubtful whether both could be kept at full strength at the same time. Xerxes disposed of something like double these forces. It was his obvious strategy to use his superior numbers to turn the Greek positions. The probability that he would do so was fully realised by the allies, who shaped their plans not only to meet it but to take advantage of it. For the weakness of a turning movement is apt to be this, that it divides the force which attempts it, and perhaps gives the enemy a chance of making a concentrated attack on one or other of the divisions. But if the superiority in numbers be very large and the turning movement very wide this weakness is avoided, for the enemy cannot afford to divide his defence, and cannot move fast enough to prevent one or other of the divisions effecting its purpose. If Marathon, for example, had been a hundred miles from Athens, the Persians might have captured the city in spite of their defeat. So likewise if the allies had met Xerxes in force at Tempe, or even at Thermopylae, he would doubtless, since he commanded the open sea, have landed an army in the Peloponnese within a few days, which would have occupied Sparta or the isthmus long before they could get back to defend them. The reason why Xerxes never attempted to land troops behind the isthmus was, not that he could not dispense with his fleet for a time—he did for over a fortnight, not to mention his retreat—but that the Peloponnese was so strongly garrisoned that any force which he could have landed there would have been at once annihilated. It was simply a consequence of the Persian naval supremacy that the Greek defence on land had to be as much as possible concentrated.¹⁶

A third calculation must also have weighed with those responsible for

¹⁵ Cf. Hdt. vii. 206, φυλακὰς λιπόντες ἐν τῇ Σπάρτῃ : viii. 26. αὐτόμολοι ἄνδρες ἀπ' Ἀρκαδίας. Possibly the need of gathering the harvest may

also have delayed the Peloponnesians. Cf. Ed. Meyer, *Gesch. d. Alt.* iii. § 234.

¹⁶ Cf. Hdt. vii. 175, ἀγχοτέρῃ τῇ ἐωνῶν.

the Greek plan of campaign. It was bad enough, but inevitable, to have one disaffected state behind the defence. It was much worse to have two or three, all of them *ἐφεδρεύοντες τοῖς ἀτυχήμασι*.

These considerations clearly indicated that the main line of defence by land must be the isthmus. But to confine the defence to the Peloponnese was a plan open to grave objections, the least of which was the abandonment of all northern and central Greece and of all hope of support from the states north of Cithaeron. It was all very well to crush a corps landed from the Persian fleet. It was all very well to fortify the isthmus and defy Xerxes there. But if once Xerxes arrived at the isthmus with army and fleet together, the defenders would have to meet the two attacks at the same time, and that became a serious matter. The allied fleet of course could not hope to beat the Persian if it came to a pitched battle in the open sea off the Peloponnesian coast.

To advance the land defence farther northwards was impossible. But if the fleet could find a favourable station before the isthmus, it might seriously check and cripple the enemy, or even wrest from him the command of the sea. A naval victory was far the best solution for the allies, because the isthmus could not be turned by land, and if Xerxes lost command of the sea, he had at once to think of his own communications, and of the revolt of his Ionian subjects which was bound to follow on the first appearance of a Greek squadron. In the naval strategy we may plainly discern the mind of Themistocles. His plan was to post himself in a narrow sound, where the enemy could make no use of his numbers for a direct attack, but might be tempted to detach a squadron to take the Greeks in the rear. Themistocles would then fall upon his main fleet and endeavour to defeat it before the circumventing squadron could come into action.¹⁷ Either the sound inside Salamis or the sound inside Euboea was excellently suited for his purpose. The difficulty was to induce the enemy to attack the fleet instead of ignoring it and sailing past. In this regard, as in others the Euboean channel was far the better position. Here the configuration of Greece came to the aid of her defenders. The pass of Tempe or the pass of Thermopylae might be held by a handful of resolute men whose absence would not appreciably weaken the garrison of the Peloponnese. But if Xerxes were checked by land, without the Peloponnese being laid open to invasion by sea, he would be compelled to use his fleet to turn the obstruction and force the defenders of the pass to evacuate their position. He had to arrive at the isthmus by land, and occupy the Greek army there, before he could successfully attack the Peloponnese by sea. But a Greek fleet posted between the north end of Euboea and the south end of the Magnesian promontory guarded the only landing-places which give practicable access to the interior of the country in the whole stretch of the Hellenic peninsula from Tempe to Marathon. Marathon was of course too far south for the landing. A force disembarked there would be exposed to attack from the allies on its march through

¹⁷ The lessons of Marathon had not been lost on Themistocles; cf. *Plut. Them.* 3.

Boeotia. Therefore if Xerxes were 'held up' at Tempe or Thermopylae, he would have to attack the Greek fleet at Artemisium, and if the Greeks could win a decisive victory there, Greece might be saved from invasion, for the Peloponnesians would be set free to come up to confirm the defence of the pass, or even assume the offensive against what part of the Persian army could be spared to continue the campaign after the defeat of the Persian fleet.

Accordingly, when Xerxes reached Abydos, 10,000 hoplites under the Spartan Euaenetus¹⁸ and Themistocles himself were sent by sea (the natural route) to Halus, whence they marched to Tempe. The fleet which brought them remained in the Pagasaeon gulf ready to take up its station. It seems to have been hoped that the appearance of the allied army would induce or compel the Thessalians to join the defence, possibly by bringing the Laconizing faction into power. The message sent by 'the Thessalians' to the isthmus may not have had exactly the significance ascribed to it in Herodotus (vii. 172). The version retailed by him, and the persistent attempts to cast all responsibility for Thessalian medism upon the Aleuatae, are evidently apologetic—let any one who still doubts this interpretation read vii. 130 with its deliciously naive ending. At all events the invitation to the allies does not appear to have expressed the mind of the Thessalians as a whole. The cavalry did indeed present itself, and there was no overt medism, but the tribesmen held aloof. Moreover Tempe is by no means the only pass into Thessaly, and the force present was quite insufficient to defend all the passes. To close the north frontier of Thessaly would have required a much larger army than could be spared from the Peloponnese. It is probable that the organisers of the expedition really did know of the other passes, but hoped that if the allies held the vale of Tempe, a general levy of the Thessalian tribes would turn out to guard the others, just as the Phocians guarded the Anopaea while Leonidas held Thermopylae. This hope proved fallacious, so the expedition returned to the ships and sailed back to the isthmus. The apologetic account reproduced by Herodotus slurs over the real reason of the retreat.

The failure in Thessaly was a serious blow to Themistocles' policy. The defence seemed to have fallen back to the isthmus and Salamis. Could the allies be induced to go back to Artemisium, and instead of Tempe to hold Thermopylae, a stronger position no doubt, but in some degree open to the same objections, for it too could be turned by land, and the peoples of Central Greece, especially the Boeotians, were no more to be trusted than the Thessalians? Could the Athenians, on the other hand, be induced to give up all hope of a serious land defence north of the isthmus, and to evacuate Attica if the navy failed (as was only too likely) to cripple the enemy's fleet? There was evidently a party in Athens strongly opposed to the idea of surrendering

¹⁸ *Συμετός*, Diod. xi. 2, is an obvious clerical error, ΣΥ = ΕΥ and ΑΙ has been absorbed in the Ν. Mnemos and his 500 Thebans may

have joined the allies in Thessaly (Plut. *de Her. malign.* 31), but the authority of the Boeotian Aristophanes is not above suspicion on such a point, as the context indeed might suggest.

their country without a battle. They demanded that if Thermopylae could not be occupied in force, at least the Peloponnesians should turn out to defend the line of Cithaeron (Hdt. vii. 141, lines 4 and 5 of the oracle, viii. 40).

It was probably at this crisis that the famous oracles were delivered to the Athenians at Delphi. Herodotus no doubt (vii. 140-4, and especially the first sentence of 145) conceives that they came earlier in the story, but he lays no stress on the occasion, and both the tone of the responses and the circumstances of their delivery postulate a more pressing danger than threatened Athens at the date indicated by his words. The expedition to Thessaly moreover is quite incompatible with that date.¹⁹ On the other hand, we cannot postpone the occasion till after the fall of Thermopylae. Then there was no time for missions to Delphi and no question of policy left to be settled.

If Themistocles looked for help from the God in persuading the Athenians, he got more than he wanted. The priestess poured forth terrible menaces, and bade them begone to the ends of the earth. That advice went far beyond the wishes of the government. So the envoys procured the intervention of an influential Delphian, Timon, to mitigate the utterance in the sense which they desired. The second response promises salvation in the 'wooden wall' and hints at a battle at Salamis.²⁰ Not a word of Artemisium! To the Delphians, who did not expect or wish the allies to hold Thermopylae and Artemisium, who aimed above all things at saving their temple and its treasures, and dreaded above all things to be compromised in Xerxes' eyes by the defence, Salamis was the uttermost and northernmost limit of concession to be granted to the Athenians consistently with the interests and prophetic reputation of the oracle.

Since the countenance of the Delphic God was averted, Themistocles seems to have sought to recommend his strategy by the authority of Bakis. He produced an oracle which promised a naval victory to bring freedom to Hellas when her enemies bridged with their ships the channels at the north and south ends of Euboea, at Artemisium and Cynosura. After the failure at Artemisium and the victory at Salamis this prophecy was transferred to the latter, as we find it in Herodotus,²¹ in spite of the strain put upon the topography.

¹⁹ See Hauvette's arguments, *Hérodote*, p. 327, which do not, however, face the pluperfect *ἐγεγόνει*, at the beginning of Ch. 145.

²⁰ There is no cogent reason for rejecting a line of the two oracles. The alternative plans of defence were of course known at Delphi, and it was obvious that Salamis was the naval counterpart to the isthmus. Mr Bury (*Class. Rev.* x. (1896), p. 417) detects in the words *ἔτι τοί ποτε κἀντίος ἔσση* a reference to Plataea, but so natural an idea needs no special explanation. 'He that fights and runs away will live to fight another day.' *Ἐσχατα γαίης* could, if it proved convenient, be interpreted to mean the Pelopon-

nese.

²¹ viii. 77; cf. 76, where Cynosura appears to be taken from the oracle, as Grote saw, and Munichia is mentioned for the sake of the temple of Artemis there, (cf. Stein *ad loc.*). *Κέος* is quite unknown, but *Κέον* might conceivably be a corruption of *Κέω*, and so transferred from a narrative of the Euboean operations. Grote was right, I believe, in suspecting the current explanation of the names (3rd. ed., vol. v. 176); but it is likely that the long eastern promontory of Salamis was called *Κυνόσουρα* (cf. Plut. *Sol.* 9, where *χηλὴν τινα πρὸς τὴν Ἐββοίαν ἀποβλέπουσαν* suggests a confusion

At all events the allies decided, although not, it would seem (Hdt. vii. 175), unanimously, to return to Artemisium and to occupy Thermopylae. The striking disproportion between the land and sea forces despatched plainly indicates that the intention was merely to hold Xerxes' army in check long enough to enable Themistocles to try conclusions with the fleet. The troops sent to Thermopylae consisted of 4,000 Peloponnesians, including 300 Spartans under Leonidas. On the way they picked up 700 Thespians and 400 Thebans, and, in obedience to a summons sent in advance, 1,000 Phocians and the full levy of the Locrians mustered to meet them at Trachis. The total force may have numbered about 6,500 hoplites and some light-armed troops.²² It was sufficient to defend so strong a position for a few days, which was all that was contemplated, although the pretence was naturally kept up that a larger army was to follow (Hdt. vii. 203). The fleet at Artemisium consisted, according to Herodotus (viii. 1-2), of 271 triremes, to which must be added the fifty-three which came up later (viii. 14), making a total of 324, besides nine penteconters. Herodotus' figures look like an official list, but most of the contingents reappear with the same numbers at Salamis in spite of the rough handling which they received at Artemisium (viii. 18). We cannot accept *both* enumerations. Has Herodotus transferred his numbers (so far as they coincide) from Salamis to Artemisium or from Artemisium to Salamis? We should naturally expect to find the contingents at their full strength at Artemisium rather than, after several stubborn actions, at Salamis. The 200 Athenian ships represent to Herodotus' mind the total navy of the state (cf. vii. 144, viii. 62). Half of them were more or less seriously damaged at Artemisium, yet all reappear at Salamis. Aeschylus puts the fleet at Salamis at only 310 ships (*Pers.* 338-40). The earlier list therefore appears to be the authentic enumeration.

There is a discrepancy of two days in Herodotus' narrative between the events at Artemisium and at Thermopylae. Busolt²³ solves the difficulty by inserting two days in the diary of the fleet. But it seems probable that it is

between two *Κυνόσουραι*, or a gloss upon the word), and that this coincidence helped the transfer. In the third line of the oracle I put no stop, and take *ἐλπίδι μαινομένη* to qualify *πέρσαντες*. My interpretation of the oracle is supported by the lines on the monument of the Megarians (*Oesterr. Jahresheft*, ii. pp. 238-9)—

τοὶ μὲν ὑπ' Εὐβοία καὶ Παλῖω, ξινθα καλεῖτε
ἀννᾶς Ἀρτέμιδος τοξοφόρου τέμενος.

²² The epigram (Hdt. vii. 228) gives 4000 from the Peloponnese, and Herodotus, viii. 25, evidently took his 4000 dead from this source, although it speaks only of Peloponnesians and not of dead but of living. Herodotus vii. 202, enumerates only 3100 Peloponnesians. He elsewhere (viii. 25) mentions Helots, and seems to imply (vii. 229) that each Spartan was attended by one Helot. But it is not likely that the

epigram includes the Helots any more than Herodotus does. Herodotus' list, therefore, appears to be incomplete. Isocrates (Paneg. 90, Archid. 99), Ctesias (*Pers.* 25), and Diodorus (xi. 4) speak of 1000 Lacedaemonians. This supplement may be thought to be either confirmed by Demaratus' words (Hdt. vii. 102) or derived from them. Diodorus gives 1000 Locrians and 1000 Malians. The Malians are improbable, but 1000 is nearer the mark for the Locrians than Pausanias' 6000 (x. 20, 2), and not many of them need have been hoplites.

²³ *Griech. Gesch.*, 2nd ed., vol. ii. p. 681, note 3. Cf. Hauvette, *Hérodote*, p. 372, Grundy, *Great Persian War*, p. 319. Mr. Bury, on the other hand, accepts *τριταῖος*, and deducts two days from Xerxes' delay. (*Ann. of Brit. Sch. at Athens*, ii. pp. 95-7.)

the diary of the army which is at fault. Herodotus (viii. 15) means the three days of fighting at Thermopylae to coincide with the three days of fighting at Artemisium. Xerxes' four days of inaction before his first attack are surely intended to be the day of his arrival and the three days of the storm. He would naturally wait for his fleet to come into co-operation, and possibly he was hampered by other obstacles, as we shall see. He must have arrived before Thermopylae on the same day on which the fleet reached the Sepiad strand, that is to say on the twelfth day out from Therma (Hdt. vii. 183), and not the fourteenth, as Herodotus implies in the word *τριταῖος* (vii. 196). Doubtless the arrival of the army and fleet at these points had been timed to coincide, and Herodotus clearly means them to coincide, in other passages (vii. 184, 186, viii. 66) where he refers to the total force led by Xerxes, *μέχρι Σηπιάδος καὶ Θερμοπυλίων*.

It was probably about the time when Xerxes marched from Therma that the Persian admirals sent out a fast squadron of ten ships to reconnoitre. We must suppose that in order to escape notice they kept well outside Skiathus and perhaps touched at Skyrus—the Dolopes had medized—where Pammon may have given them his warning about the rock Myrmex. Thus they approached the channel between Skiathus and Magnesia from the south and pursued the three Greek ships on guard there *northwards*, leaving three of their own (which the Greeks at Artemisium seem to have mistaken for the guard-ships, for they did not molest them) to set up a mark on the rock.²⁴ This incident must have happened before Xerxes entered Thessaly, for he must certainly have occupied Tempe, and then the crew of the Attic ship which was run ashore at the mouth of the Peneius could hardly have escaped. In any case Herodotus implies (vii. 183, *ὥς σφι τὸ ἐμποδὼν ἐγγέγονε καθαρὸν*) that the ten ships returned to announce that the course was clear before the fleet sailed from Therma. Yet he involves their reconnaissance with the sailing of the fleet in an extraordinarily confused fashion (vii. 179, 183), and ascribes to their capture of the three guardships an effect on the minds of the Greeks which is utterly incredible. He tells us that the news was signalled to Artemisium by beacons from Skiathus, and that the Greeks thereupon fell back in a panic to Chalcis—that is to say, abandoned Artemisium, exposed the flank and rear of the army at Thermopylae, and stultified the whole plan of campaign! Fortunately Herodotus himself supplies a clue to unravel his own confusions, which has been most sagaciously followed up by Mr. Bury in an article in the second *Annual of the British School at Athens*. He adds that the intention of the Greeks in shifting their station to Chalcis was to guard the Euripus—*μετωρρίζοντο ἐς Χαλκίδα φυλάξοντες τὸν Εὐριπον*. What danger threatened the Euripus? Mr. Bury has ingeniously shown that what was really signalled from Skiathus was the passage outside that island of the 200 ships sent to turn the Greek position by circumnavigating

²⁴ Herodotus (vii. 179-83) conceives that the Persian squadron made straight for Skiathus, and the three ships ran on beyond the rest as

far as the rock, *ἐπήλασαν περὶ τὸ ἔρμα*. But this conception does not fit his story.

Euboea, and that it was not the whole Greek fleet that fell back to defend the Euripus, but only the fifty-three ships afterwards introduced into the narrative from nowhere in particular (Hdt. viii. 14). It is impossible to believe that the whole Greek fleet left Artemisium, but the despatch of the fifty-three ships would account for the story.²⁵ It is impossible to understand the stratagem of sending the 200 ships outside Skiathus if they were sent, as Herodotus states (viii. 7), from Aphetae, in full view of the Greek station, and in the broad daylight of the mid-afternoon. It is impossible that these ships should have quitted Aphetae in the afternoon, rounded Skiathus and Cape Geraestus, and reached the Hollows of Euboea in about twelve hours, as Herodotus' account demands (viii. 6-14). But these objections of time and place are avoided by Mr. Bury's hypothesis that the 200 ships parted company with the main Persian fleet off the Sepiad strand. I need not repeat all his arguments, but I will add a few considerations which confirm them. In the first place, nothing which had not been foreseen could be signalled by beacons. It must have been preconceived that beacons should be lighted in certain numbers and certain positions, if the enemy did this or that, which it was foreseen that he might do. The capture of the Greek scouts, after a chase which carried them (say) fifty miles north of Skiathus, cannot have been either seen or foreseen, and so cannot have been signalled. But the passage of some of the enemy's ships outside Skiathus was a contingency which must certainly have been foreseen, and arrangements were doubtless made for signalling both the fact and the number of ships. Thus both the ten ships and the 200 would be signalled, and Herodotus has confused the two squadrons. He knew that the ten ships came within sight of Skiathus,²⁶ he had no idea that the 200 parted from the fleet before it arrived at Aphetae. Hence he could only refer the signal to the reconnaissance. This explanation throws light on both sides—the movements of the ten ships are mixed up with the movements of the 200, no less than the movements of the 200 with the movements of the ten. Secondly, the use of beacons suggests that the signal was made at night. The Persians must have put in to the Sepiad shore about sunset (Hdt. vii. 183), and the 200 ships would pass Skiathus with the last of the daylight. Thus the fire-signals fit the hypothesis. Thirdly, we can hardly believe that the despatch of the 200 ships was a happy thought which first occurred to the Persian admirals at Aphetae. It was surely a deliberate plan premeditated at Therma.²⁷ But if so, can we believe that these ships were ever brought inside Skiathus to Aphetae?

²⁵ Mr. Grundy, *Great Persian War*, p. 324, supposes that the whole Greek fleet had to run before the storm round Cape Kenaeum. It is more likely that the ships were drawn up for the night on the strand at Artemisium, but even if about they had fair shelter there, and safety hard by at Oreus; v. Lolling in *Ath. Mitt.* viii. p. 16.

²⁶ Possibly Herodotus' information about the capture of the three ships came from Pytheas, (vn. 181, viii. 92), about the signal from some one with the fifty-three ships, and he has unskillfully combined them.

²⁷ It might help to explain Xerxes' delay before Thermopylae.

It is an additional advantage to Mr. Bury's theory that it dispenses with the second storm, which looks very much as if it were got up on purpose to account for the wreck of the circumnavigating squadron. Herodotus knew that this squadron was wrecked, but inasmuch as he did not start it on its voyage until after the first storm, he was driven to postulate a second storm to wreck it. It must be admitted that his efforts to raise the wind put some strain upon our credulity. Two storms in as many days are a most unusual phenomenon in Greece in August or September. At Aphetae the second storm produces absolutely no effect that might not be due to the ordinary land breeze blowing down the channel at night.²⁸ There is thunder and heavy rain, but that is not the weather for wind, and no wind is mentioned. Can the same night have been so tempestuous at the south end of Euboea? But, it will be urged, Herodotus wrecks the 200 ships at the Hollows of Euboea, and the first storm was a north-easter (viii. 13, 14, vii. 188). How could a storm from the north-east drive ships on the south-west coast of Euboea? And if the 200 ships were wrecked in the first storm, why do not the 53 ships get back to Artemisium until the day before the last battle? As regards the Hollows, Herodotus refutes himself. He tells us (viii. 13) that the night of storm fell upon the Persians *ἐν πελάγῃ φερομένοισι*, and he expressly distinguishes *τὸ πέλαγος*, the open Aegean, from the sheltered waters of the channel (vii. 176, 193; cf. iv. 85). That the shipwreck took place in the 'first' storm, and outside, not inside Euboea, may also be inferred from vii. 192, where the scouts run down from the hill-tops to Chalcis on the second day of the storm, and announce to the Greeks there *πάντα τὰ γειόμενα περὶ τὴν ναυγήν*. The main Persian fleet was at the Sepiad strand, forty miles north of Mount Dirphys, and if visible from there (which I doubt²⁹), at all events concealed by the corner of Magnesia from the more northerly Euboean hills. How much could the scouts report of the shipwreck of the main fleet, especially in such dirty weather? No! what they reported must have been the wreck of the 200 ships, and that wreck must have been on the east coast of Euboea, for the scouts run down from the hills, not up the west coast from the Hollows (where indeed the scouts would be ships). The scouts were doubtless sent up from Chalcis to Mount Dirphys and other points of vantage to signal the progress of the enemy's circumnavigation, and

²⁸ The dead and wreckage of the first battle drift to shore at Aphetae—*ἐξεφορέοντο ἐς τὰς Ἀφετάς*. The exact position of Aphetae is unknown. In spite of Hdt. vii. 193-5, it is difficult to believe it lay inside the gulf of Pagasae, and he elsewhere estimates its distance from Artemisium at 80 stades (viii. 8). The *ἐξ* in *ἐξεφορέοντο* does not help us, for it has no reference to direction (cf. *ἐκφέρεσθαι*, viii. 49, 75, and *ἐκπίπτειν*). But one would expect to find Aphetae rather east than west of Artemisium, else the Greeks would have been in danger of being cut off from the Euripus.

Near Olizon would be the natural site, perhaps on the narrow isthmus, and so practically on both the gulf and the outer strait. Possibly Herodotus imagined that the east and south coasts of Magnesia made an acute angle, and reckoned the latter to the gulf. The tide in the Euboean channel (Hdt. vii. 193) *might* account for the drift of the wreckage without any wind at all; but I do not pretend to know how it sets.

²⁹ If the maps are accurate there can be very little daylight, if any, between the west point of Skiathus and the east point of Magnesia, as viewed from Mount Dirphys.

not left behind above Artemisium, as Herodotus in conformity to his general misconception imagined (vii. 182).

But something must have happened at the Hollows to bring them into the story. What was it? Perhaps our answer to the second objection will enlighten us. The fifty-three Attic ships get back to Artemisium, with the news of the wreck of the turning squadron, on the afternoon of the day before the last battle (Hdt. viii. 14). This date is very early if (as Herodotus fancies) the wreck took place only on the preceding night, but it is very late if the wreck is to be placed (as we argue) on the first night of the great storm. The fifty-three ships were sorely needed at Artemisium. How do we account for the delay? In viii. 14, Herodotus mentions three incidents one after another. The first is the arrival of the fifty-three ships. The second is the news of the wreck, which arrived at the same time. Herodotus does not expressly say that the ships brought the news, but the inference is almost certain (cf. Bury, *l.c.* p. 89). The third item is that the Greeks, emboldened by the reinforcement and the news, sallied forth at the same hour as on the previous day, fell upon the Cilician ships, and having destroyed them started at nightfall to sail back to Artemisium. This attack was evidently a serious action, for Herodotus twice refers back in a pointed way to the Cilicians (viii. 68, 100). But it is difficult to see how the Cilician ships came to be isolated from the rest, and why no assistance was sent to them from the main fleet. And it is difficult to see why the Greeks should have waited for the same hour as before. Is it not possible that this action was really fought at the Hollows of Euboea by the fifty-three ships, and formed part of the news which they brought, but that Herodotus has transferred it by a misunderstanding to Artemisium? That none of the 200 ships survived is hardly credible. The survivors would naturally have rallied in the Hollows under the lee of Euboea, and may well have been destroyed there by the fifty-three ships on the day after the storm at about the same hour as the Greeks at Artemisium were fighting their first battle—a coincidence which would be remembered. The fifty-three would then have ‘started at nightfall to sail back to Artemisium.’ The Cilician squadron, we may suppose, was the largest contingent of the 200. Herodotus was all the more likely to transfer the action itself to the place and time of its announcement, because he was prepossessed with the parallel between the fighting at Artemisium and at Thermopylae. It may be noted for what it is worth that Diodorus emphasises the separation of the Persian squadrons, and describes only two battles at Artemisium (xi. 12–3).

Minor points must not long detain us. The recurrent *motif* of panic and retreat is of course inconsistent with our general conception of the campaign, but it is also inconsistent with the record of the fighting, and is adequately accounted for by Herodotus’ desire to bring out the dramatic contrasts in his story, and by the prejudices of his informants.

In particular the story of the bribery of Themistocles (viii. 4–5) is to be rejected. It does not harmonize well with viii. 19–20, where the Euboeans *ἐξεκομίσαντο οὐδέν*, and it falls into line with the other slanders and insinuations whereby Herodotus’ malignant (Alcmaeonid) source seeks to take

away the credit of Themistocles' achievements and blacken his character when it cannot deny his ability. Is it likely that any Greek would have squandered thirty talents on Themistocles when he might have bought Eurybiades, the commander-in-chief, for five? Eurybiades has suffered for the sins of his fellow-citizens individual and collective, Adeimantus of course, here as elsewhere, for the sins of his son.

The news brought by the diver Skyllias to Artemisium (viii. 8) must have been the loss sustained by the Persian fleet at the Sepiad strand, as Mr. Bury shows, rather than the despatch of the 200 ships. The news brought by the scouts to Chalcis is not however to be dismissed as mere patchwork (*v. supra*).

On Sepias—*παλαιᾶς χοιράδος κοῖλον μυχόν*—and the Nereids (vii. 191) compare Euripides, *Androm.* 1265–8.

The two positions, Artemisium and Thermopylae, were mutually interdependent. It is universally recognized that Thermopylae could not have been held without Artemisium, for it would have been at once turned by the enemy's fleet. But it is also true that Artemisium was useless without Thermopylae, for the Persians would never have attacked the Greek fleet, but simply sailed past it outside Euboea, if the land road to the isthmus had been open. All that they wanted was to get their army and fleet to the Peloponnese *at the same time*. The Greek defence by land was from the very first fixed at the isthmus. All that Leonidas had to do was to hold Thermopylae until the Greek fleet had fought a decisive action with the Persian. In the pretence that the full force of the Peloponnesians was to follow him, and the alleged hindrances of the Carnean and Olympic festivals, we have to recognise only official dust for the eyes of the extra-Peloponnesian populace (Hdt. vii. 203, 206, viii. 26, 40, 72—into this last passage Herodotus has perhaps thrown a touch of irony). On the other hand, the assertion (vii. 207) that the Peloponnesians wished to abandon Thermopylae and fall back to the isthmus, and Leonidas was only pressed into staying by the indignant protests of the Phocians and Locrians, is half malignant and half apologetic, malignant against the Peloponnesians, apologetic for the subsequent medism of Phocians and Locrians.

But Thermopylae could be turned by land as well as by sea, and that not merely by mountain paths, but by the road up the Asopus and over the *col* into Doris. This road was doubtless no *chaussée*, and may never have been practicable for wheels (cf. Livy, xxxvi. 15), but it was not a difficult road, as hill roads go in Greece, and Mr. Grundy (*Gt. Pers. War*, p. 261, 302) testifies that even at the present day, in spite of the excellent *modern* road beside it, 'there is considerable mule traffic' over it. The position of Trachis, and the colony sent there by the Spartans in the Peloponnesian War, are indications of its importance. The Thessalians were of course familiar with this road, and according to Herodotus led the Persians by it into Phocis after the fall of Thermopylae (viii. 31). Artabazus retreats by it after the battle of Plataea (ix. 66, 89).

Why then did not Xerxes adopt this route on his first arrival before

Thermopylae, or at all events send a division by it to turn Leonidas' position, which was not worth two days' purchase if this road was open? There can be only one satisfactory answer³⁰—*the road was held*. Mr. Grundy has well brought out two facts: (1) that the road was very easily defended, for the gorge of the Asopus, up which it runs, is long and precipitous, and so narrow that at one point it contracts to twelve feet (pp. 261–301); (2) that the defence of Thermopylae regularly included the defence of Heraclea (Trachis), which commanded the gorge (pp. 262–4, note). Heraclea³¹ lay at the foot of the flat-topped hill which overhangs the mouth of the gorge on the west. This hill formed the citadel, a very strong position, which the Greeks cannot conceivably have left unoccupied. Even the lower town was so strong that in 191 B.C. a garrison of 2,000 Aetolians defied the consul Acilius Glabrio and his army there for twenty-six days (Livy, xxxvi. 16, 22–4). We can scarcely doubt, in spite of the silence of Herodotus, that Xerxes found at least the citadel of Trachis occupied, and consequently the Asopus road barred to him. This inference is supported by a parallel omission in Herodotus' distribution of the defenders. The Peloponnesian and Boeotian contingents were with Leonidas in the pass, the Phocians were guarding the path Anopaea, but where were the Locrian levies? The Locrians must have been the garrison of Trachis.³²

Herodotus's description of the path Anopaea, which started from the Asopus (vii. 216), and of the march of the Immortals (217), might naturally be taken to imply that Hydarnes began by ascending the gorge. This view seems to be universally accepted without further question. If it is right, we must suppose that Trachis had meanwhile been captured, or surrendered by the Locrians. But Pausanias, who had been at Thermopylae (iv. 35), gives a different account. In his narrative of the invasion of the Gauls under Brennus (x. 19–23), he describes two paths up into the mountains near Heraclea, neither of which can be identified with the Asopus road. The one was very steep and abrupt, started from near Trachis, and passed not far from a temple of Athena. In this path I recognize the original of the modern high road, and in the temple of Athena the original of the monastery of the Panagia. The other was easier for an army, and led through the territory of the Aenianes, *i.e.* round the western end of the Trachinian cliffs.

³⁰ Mr. Grundy (p. 269 and elsewhere) seems to me to make too much of the difficulty of transport. He appears to imagine Xerxes' commissariat train entirely on wheels, whereas one might gather from Herodotus that it consisted entirely of pack-animals of various kinds, including camels (see, among numerous references, especially vii. 125, 187; and cf. ix. 39). Probably the truth lies between these extremes. But there are very few tracks too difficult for the light, narrow Asiatic ox-waggon, and an oriental army (*pace* Herodoti) requires extraordinarily little baggage or even food.

³¹ On Heraclea Trachis, v. Livy, xxxvi, 22–4,

Thuc. iii. 92, Hdt. vii. 199, Strabo, 428, Paus. x. 22, Leake, *N. Greece*, ii. pp. 24–31. Herodotus implies. I think (with Mr. Grundy, p. 282), that the lower town was on the Thermopylae road. It is clear from Thucydides that there was never any change of site, although in Roman times (Strabo, Paus.), when Heraclea had completely retreated up the hill (cf. Livy), the ruins of the lower town, six stades below, were exclusively known as Trachis.

³² It may be noted that the Locrians and Phocians mustered *ἐς τὴν Τρηχίνα*, and that Xerxes commands all northern Greece, *μέχρι Τρηχίνος* (Hdt. vii. 203, 201).

Presumably it passed behind Trachis and connected with the Anopaea path in the valley of the Asopus above the gorge, for this, says Pausanias, was the path by which Hydarnes, and afterwards Brennus, circumvented the defence of Thermopylae (x. 22, § 8, cf. § 1). There is nothing in Herodotus inconsistent with Pausanias, on the contrary, the expression τὸν Ἀσωπὸν διαβάντες (vii. 217), which is unnatural on the received view, distinctly supports him.³³ There may be topographical objections, but I cannot discover that the topographers have ever even considered the question. If Pausanias's account may be accepted, the Persians simply turned the obstacle of Trachis to get at Thermopylae.

If Trachis still held out, the Phocians who were guarding the path Anopaea can hardly have expected an attack from the side of the Asopus. But they had another function, which, although barely hinted at in the story retailed by Herodotus, may have occupied more of their thoughts. They were not merely φρουρέοντες τὴν ἀτραπὸν, but also ῥυόμενοι τὴν σφετέρην χώρην, which interpreted into the concrete means defending Pausanias' *steep* path whereby the Gauls first attempted to scale the ridge of Oeta. We should expect therefore to find them posted somewhere near the intersection of this path with the Anopaea, probably somewhere not far from the monastery of the Blessed Virgin.³⁴ This station seems to me to fit the notes of time in Herodotus's narrative better than Leake's and Mr. Grundy's, and to be confirmed by the *oaks* which the latter notes (p. 302) in this zone of the forest, surely a genuine touch in the tradition. It also saves Hydarnes from too much forest-groping in the dark.

What happened in the morning twilight we shall never know for certain. It is obvious that Herodotus gives us only the Phocian apology, and a ludicrously lame one it is (vii. 218). We may conjecture that he is inspired from Delphi, for the tone of the advocate for the accused is audible in almost all that he says about the Phocians. Their spirited reply to the overtures of the Thessalians, and the old feud between the two peoples, dragged into the story time after time, are on a par with the Athenian reply to Alexander of Macedon, and the Alcmaeonid hatred of tyrants. The devastation of their country is too emphatically paraded in contrast to the immunity of Boeotia to absolve them from the charge of medism. The fastnesses of Parnassus are the last refuge of their reputation. Their courage is vindicated in the very camp of Mardonius. And even this shameful farce on the Anopaea is worked into a blasphemous parody of the last heroic stand of the Spartans at Thermopylae! At best these Phocians were more anxious to defend the path into

³³ So perhaps does the phrase ἐν δεξιῇ μὲν ἔχοντες ὄρεα τὰ Οἰταίων, ἐν ἀριστερῇ δὲ τὰ Τρηχυνίων (v. Leake, pp. 54-5), and ἡ περίοδος τε καὶ ἀνάβασις in vii. 223.

³⁴ Herodotus's expression, ἐπ' ἀκρωτηρίῳ τοῦ ὄρους (vii. 217), can no more be pressed than his κατὰ ῥάχιν τοῦ ὄρους (216), or ἐπὶ τοῦ ὄρους τὸν κόρυμβον (218). It is likely enough that he

travelled the coast road (as Mr. Grundy argues at large), but the upper path remained to him vaguely something 'up there.' Possibly his guide or his own imagination fastened upon the rocks which Mr. Grundy (p. 302) calls the Great Gable, and they may be either the ἀκρωτήριον or the κόρυμβος.

Phocis than the path to Alpeni. At worst they bartered away the safety of Hellas and the lives of their allies for the security of Delphi and its treasures. A thousand Phocians appear next year in the enemy's ranks (Hdt. ix. 17, 31); is the number a mere coincidence? At all events the Phocians cleared out of the way, retiring towards the summit of the ridge, probably on the path towards Phocis, and the Persians did not follow them far, but having dismissed them, possibly with a few volleys of arrows, resumed their march for Alpeni.

Meanwhile what of Leonidas? He easily repelled the assaults of the first two days, which were probably not so seriously meant as the Greeks imagined. For the Persian generals clearly had no idea of carrying the position by a frontal attack. Their initial delay is to be explained by three considerations, all of which may have contributed to determine their inaction at Thermopylae. First, there was the expedition of the 200 ships round Euboea, which promised to compel the Greeks to evacuate the pass without striking a blow. Secondly, it is probable that the Persians at least attempted to get possession of Trachis, and so open the other pass, with much the same result. Thirdly, the turning movement by the Anopaea may have been already contemplated, but deferred by the storm which, even without rain (and much rain would be unusual in such a storm), would render night-marches in the mountains difficult. It is highly probable that this movement was originally designed for the night of the day after the storm, but was prevented by the heavy thunder rain with its *ρέύματα ισχυρὰ ἐς θάλασσαν ὀρμημένα* (Hdt. viii. 12), which would raise a spate on the Asopus (cf. Grundy, pp. 262, 300). It seems likely therefore that both the first and second assaults were rather feints to divert attention from the turning movement than serious efforts to force a passage. It was during the second night and at daybreak next morning that the earliest intimations of Hydarnes' march reached Leonidas, and it is here that our difficulties begin.

Apart from the jarring note of Theban treachery, which may be explained as a later interpolation by the author into his original draft (cf. the last words of vii. 233), Herodotus's whole narrative of the defence of Thermopylae reads like a national poem. Like the *Persae* of Aeschylus it seems to breathe the spirit of the *entente cordiale*, the *ξυμμαχία ἐπὶ τῷ Μήδῳ*. For the moment the clouds of spite and jealousy are melted and the story suffused with a glow of generous idealism. It is this chapter of his history which we might fancy to have been chosen by Herodotus for recitation at the Olympic festival, and to have moved the boy Thucydides to tears. One feels almost guilty of sacrilege in pointing out that this golden legend of heroic self-sacrifice and patriotic devotion owes its origin to a politic fiction and its ungrudging acceptance to a coincidence of interests. But, fortunately, when criticism has said its last word, there remains in the bare facts enough of sober heroism to console us for the loss of the adventitious glories of the romance.

Three motives are very evident in the narrative of Herodotus: first, the wish to explain the catastrophe by the oracle: second, the wish to shield the

allies from the blame of having left Leonidas to his fate; third, spite against the Thebans. The two former are closely related. In the oracle, which here (vii, 220) appears for the first time, and is inconsistent with the account of Leonidas's expedition given a few chapters before (202-7),³⁵ we must recognize the official explanation of the disaster, put forward to counteract the impression made on the minds of the Greeks by the news that one of the Spartan kings had been defeated and slain. It was produced to meet the discouragement which would naturally follow on so sinister an opening to the campaign, and to turn the bad omen into a presage of victory.³⁶ But although primarily in our view an apology for a *fact*, an *event*, the story of the voluntary self-devotion of Leonidas and his band of heroes proved to all parties so convenient a screen against censure, that it was at once adopted by tacit consent as the authorized version, and being unchecked by any criticism soon won its way to the domain of the romantic. The responsibility was indeed pretty equally distributed. The Spartans were chiefly responsible for the conduct of the campaign on land, and in a more general way for the whole policy of the league. They not only saved but enhanced their military reputation, and could now point to a signal and disinterested sacrifice in the cause of their allies. The Athenians above all the rest had to answer for the plan of holding Thermopylae. It was their advocacy which had persuaded the Spartans to attempt the defence of the pass, and 'let them in for' this calamity. The Peloponnesian allies escaped all blame of having basely deserted their general in the hour of need. It was simply a consequence of the voluntary self-devotion of Leonidas that he should have bidden them depart in peace, and the λόγος adopted by Herodotus (vii, 220), confessedly in the face of his facts, may even have been an original part of the explanation, for the Spartans could not in the crisis of the war afford to be exacting. Even the Phocians gained by the diversion, for they shared the blame with the Gods and their excuses were not so closely scrutinized. Only the brave Boeotians suffered wrong, but *they* no longer counted for anything.

It need scarcely be pointed out that the official apology is naively external in its point of view. A great disaster was fated to befall Sparta, but the fates allowed it to take one of two alternative forms. Leonidas devoted himself 'that the scripture might be fulfilled' (cf. viii. 53). Thanks to his patriotic sacrifice Sparta was now secure. The story is meant to explain the fate of Leonidas rather than his motive, still less his strategy. It was afterthought and posterity that worked up the subjective side, although even in Herodotus this elaboration is already far advanced. But we may safely say

³⁵ Except perhaps the words καὶ τοῖσι ἐτύγγανον παῖδες ἔόντες in 205. Can the τε in the preceding clause ἄνδρας τε τοὺς κατεστεῶτας τριηκοσίων be a corrupt reduplication of τ' = τριηκοσίων, and καὶ τοῖσι ἐτύγγανον παῖδες ἔόντες, an afterthought added with the note on the Thebans which fills the rest of the chapter, (cf. the opening words of 206, which would fit

on very well)?

³⁶ The view so often expressed (e.g. by Busolt, *Die Lakel.* p. 419 *seqq.*), that the Spartan government invented the oracle to excuse *themselves*, seems to me to make a false distinction between the Ephors and Leonidas, and between the Spartans and the general council of the allies.

that none of the motives attributed to Leonidas either by or in amplification of the official apology really determined his action. In particular, it was no disgrace to a Spartan *commander* to retreat when sound strategy demanded it (*e.g.* Eurybiades, Pausanias); and the explanations put forward wholly fail to account for the fact that Leonidas' doom was shared not only by his Spartan guard, who might be bound to abide by him *Λακεδαιμονίων ῥήμασι πειθόμενοι*, but also by the Boeotians, at all events the Thespians, if not the Thebans (v. Bury, *Ann. of Brit. Sch.* ii. p. 101-2).

The spite against the Thebans needs no demonstration. It is patent, and the criticisms of Plutarch (*de Her. mal.* 31-3) have never been rebutted, although they glance off Herodotus on to his malignant Athenian informants. The cloven hoof peeps out in the mention of Eurymachus (vii. 233). Leontiades, like Adeimantus, has suffered for the sins of his son, and it is likely enough that he has been promoted by Athenian enmity to a command which he did not hold, for the Boeotian Aristophanes, drawing apparently on documentary evidence, claimed it for Anaxandrus (Plut. *l.c.*). We cannot refuse to believe that the Thebans, like the Thespians, came and remained of their own free will. Diodorus (xi. 4) says that they were of the anti-Persian party, *ἀπὸ τῆς ἐτέρας μερίδος*, and the statement, although perhaps merely an inference, is yet a just and probable inference, and is supported by the Theban apology in Thucydides, iii. 62.

The attitude of the Boeotians in contrast with that of the Peloponnesians is significant. The other allies *ἔτλησαν Σπάρτης ἡγεμόνα προλιπεῖν*. The Thespians and Thebans elected to stay with Leonidas. They were not merely more nearly interested in the defence of the pass—at best now a matter of hours—but were in a desperate plight once the Persians got through. No refuge could be looked for in their own country, already predisposed to medize, and they may well have preferred to fall into the hands of Xerxes rather than into the hands of their enemies at home. While therefore we do not admit that Leonidas's intention was to immolate himself and his men, we must still recognise that it involved a risk which deterred all but the most desperate of his allies.

What then was the situation as it presented itself to Leonidas at his last council of war (Hdt. vii. 219)? Apart from the prognostications of Megistias, derived by Herodotus from his epitaph, the first news of the turning movement were brought by deserters during the night. Obviously they could announce no more than that Hydarnes had marched in a certain direction. Then came the scouts from the hills, who arrived at break of day, *ἤδη διαφανούσης ἡμέρης*. There is nothing in Herodotus to show that they brought any information beyond *τῶν Περσέων τὴν περίοδον*. The Persians reached the Phocians, who were stationed (we have seen reason to suppose) about the junction of the path Anopaea with the steep path above the right bank of the Asopus, somewhere near the monastery, at daybreak—*ὥς τε δὴ διέφαίνε* (217). This point is separated from Leonidas's position by a long stretch of difficult country. Yet the advent of the Persians and the announcement of the scouts are represented as simultaneous. It would of

course be absurd to press the expressions of Herodotus to the letter, but it is obvious that we cannot allow the scouts many minutes of observation if his words are to be even roughly accurate. We must assume that they saw the Persians come up, and may suppose that they saw the Phocians fall back before them up the path towards Doris. It is quite conceivable that they were even despatched by the Phocian commander himself to tell Leonidas that he was retiring on Phocis pursued by the enemy, whom he would endeavour to hold in check and delay as long as possible! At all events it does not appear that they waited long enough to see the Persians enter upon the path to Alpeni, or that any later message came down to Thermopylae. Leonidas, therefore, may naturally have supposed (possibly on the authority of the Phocian commander) that the Persians were making for the valley of the Kephisus and would not become dangerous to him before the next day at the earliest. Since he had not himself known of the existence of the Anopaea path until after his arrival at Thermopylae (vii. 175), he might well imagine that Hydarnes was still ignorant of it, especially as the other path, if not to be called a road, must always have been much the more conspicuous and frequented. On the other hand he was certainly kept informed of the progress of the naval contest (cf. vii. 175, viii. 21), and must have known that the decisive battle was expected on that very day. It was of supreme importance that that battle should be fought, but the Persian admirals would decline it if they learnt that Thermopylae was evacuated—was it for this news that they waited that morning (viii. 15)? There was no doubt grave danger in holding the pass for even one day longer, if the Persians were on the march for Phocis. On the morrow they might be threatening the rear of the Greeks from Bundonitza or their communications from Elatea, and once Hydarnes got upon their line of retreat the doom of the defenders was sealed—unless indeed the fleet were victorious and could pick them up under the eyes of Xerxes, as the Athenian triremes saved the Greek army from Brennus two centuries later. But the end was worth the risk, so Leonidas judged. Not so his Peloponnesian allies. They could urge at the council that the position was turned and had become untenable, that the fleet had had its chance, that now not a moment must be lost if they were to make good their retreat. So they went their way. But inasmuch as the Boeotians volunteered to stay, Leonidas reckoned that he could carry out his purpose without the Peloponnesians. He had still about 1,400 hoplites, besides the Helots, and no very determined attack was to be expected before the turning force appeared. The sudden descent of Hydarnes must have taken the defenders by surprise. All retreat was cut off.³⁷ Leonidas had

³⁷ Herodotus (vii. 225) clearly means by the *κολωνὸς ἐν τῇ ἐσόδῳ*, where the last stand was made, one of the two mounds in the middle 'gate,' cf. vii. 176. But it is perhaps possible that the tradition was attracted to the lion, and the last stand was really on the mound near the east 'gate.' If so, the Greeks may

have been overwhelmed in an attempt to withdraw, and the story of the sortie in front of the wall (Hdt. vii. 223, Diod. xi. 9, 10 Plut. *de Her. mal.* 32) may have arisen out of the confusion of the two mounds. Cf. Leake. *N. Greece*, ii. pp. 36-7, 52; Grundy *et Pers. War*, pp. 288-90.

already fallen, and the rest of the devoted band could only share his fate and his fame.³³

The disaster at Thermopylae rendered further defence of the Euboean channel nugatory, even if the Greek fleet could have held the position longer, which after their losses in the third day's battle they evidently could not (Hdt. viii. 18-9). The land roads southward were now open, and the Greek hope of snatching a naval victory had failed. The defence fell back to the isthmus and Salamis. Xerxes resumed his march.

Herodotus (viii. 31-3) describes the advance as though the whole Persian host traversed the pass from Trachis (which must have surrendered on the fall of Thermopylae) into Doris and down the valley of the Kephisis. But it has been generally recognised that the easier passes, and especially the main road along the coast, must also have been used. Probably Herodotus's information was limited to the march of a single corps, and was derived from a Phocian source at Delphi. The Phocians were afterwards anxious to cover up and excuse their Medism and this anxiety (we have seen) is reflected in most that Herodotus says of them. They would be sure to make much of their sufferings in the cause of Hellas in order to prove their loyalty and the compulsion that forced them to serve in the enemy's ranks (ix. 17, 31). There is also some difficulty in reconciling the destruction of the temple at Abae with other notices of it in Herodotus (viii. 27, 134; cf. M. Hauvette's useful summary of Pomtow's objections, *Hérodote*, pp. 380-3). We may suspect that the devastation of Phocis is grossly exaggerated, and that the real attitude of the Phocians is better expressed by Herodotus's remark in ix. 31 (apologetic as it is) than by his highly coloured narrative in viii. 27-33. Yet it can hardly be denied that there must have been some basis of fact in the story. A Persian division, especially if detached on an independent march, and free from the surveillance of the head-quarters' staff, was likely to do much damage in a Greek territory whether the inhabitants were officially regarded as friendly or hostile. In the case of Phocis there is a strong presumption that the devastation was unauthorised and contrary to the king's wishes, for, in the first place, Xerxes does not appear to have accompanied the column through the Trachinian pass, but only reappears after the junction of the coast road, secondly the Thessalians, the old enemies of the Phocians, guided the invasion by this route, and, thirdly, special care was taken that the Boeotians should not suffer in the same way—Macedonian officers were sent in advance to the several cities to protect them. This fact, and the settled policy of clemency pursued by Xerxes till he reached Thespieae, justify us in saying that the burning of the three Phocian

³³ It may be urged against the theory here stated that Leonidas must have had constant information of Hydarnes' progress. I quite admit the force of this objection, but every alternative is open to some objections, and this theory seems to me the least objectionable. It

keeps nearer to Herodotus than that which I regard as the second-best, namely, that Leonidas sent the Peloponnesians to meet Hydarnes, whether in the pass near Bunderitza (as I should say), or near Alpeni (Bury, *l.c.* p. 102), or on the Anopaea (Grundy, p. 308).

towns south of Parapotamii (if it is true) must have been perpetrated before the king arrived, and not, as Herodotus says, on the expedition to Delphi.

These considerations may throw some light on the despatch of the detachment to Delphi (Hdt. viii. 35-9). The expedition is wrapped up in supernatural disguises. It is difficult to reconcile with a later passage in Herodotus (ix. 42). The attitude of the Delphians and the interests of Xerxes himself make it improbable *a priori*. The inscription recorded by Diodorus (xi. 14) cannot be used to confirm Herodotus, for (assuming it to be nearly contemporary) it is only another expression of the same story derived from the same source. If the Persians wanted to sack the temple, why did they never do so? Neither the oracle nor the alleged repulse of this detachment gives any adequate explanation. The reason can only be that the Persians did not want to sack it. No wonder that the whole episode has been rejected by some historians! But if no force was ever sent to Delphi at all, there was no sufficient motive to invent the story—it is too far-fetched an apology for the general attitude of the Delphians during the war. We must accept the fact that a force *was* sent, and it is supported by the detail with which the road is indicated. The starting point of the road and the express mention of Xerxes' orders preclude the hypothesis of Pomtow that the detachment was merely a band of marauders. But the purpose of their mission may have been misrepresented. According to Herodotus that purpose was *ὅπως συλήσαντες τὸ ἱεὸν τὸ ἐν Δελφοῖσι βασιλεὶ Ξέρξῃ ἀποδέξαιεν τὰ χρήματα*. But it is possible that the real intention was to *protect* the temple and its treasures from plundering such as had befallen the Phocian towns. Perhaps the Persian guard was harassed from Mount Parnassus by indiscreet zealots who were not in the secrets of the God, and had been carefully sent away by his promise to take care of his own. But in any case the Delphians were sure in after days to represent the expedition as hostile, and ascribe their protection to Apollo rather than to Xerxes. If the words *ἀποδέξαιεν τὰ χρήματα* cover an inventory, the king had indeed an accurate knowledge of the precious things in the temple, and the sacred armour may have come out of its shrine only to be registered!

Meanwhile the Persian army pushed on through Bocotia. Thespieae and Plataea were laid in ashes, and Athens, save the acropolis, was occupied without a blow. Xerxes naturally made for Athens rather than the isthmus, because Athens had been from the outset one of the chief objects of his attack, and because he wished to recover touch with his fleet in order to concert the further operations against the Peloponnese. The Athenians had abandoned the city and migrated to Salamis, Aegina, or Troezen. Perhaps this migration had begun on the return of the Thessalian expedition, when the oracle of the wooden wall was probably delivered, for the Spartans in Herodotus, viii. 142, speak of the Athenians having lost *two* harvests. At all events we must not take too seriously the statement that the Athenians expected the Peloponnesians to meet the enemy in Boeotia. It is partly afterthought in the light of the Plataean campaign (cf. Ed. Meyer, *G.A.* iii.

p. 384), partly a natural protest of the agrarian opposition against the policy of Themistocles and the Peloponnesians.

The yeomen of Attica, heroes of Marathon, adherents of Aristides, who had withstood the creation of the fleet, could scarcely be expected to surrender their farms to pillage without a murmur. In the story of Herodotus the conflict of parties turns mainly on the interpretation of the oracle about the wooden wall (vii. 142-3). But the oracle had been merely the occasion, and its interpretation involved important questions of policy, not only military. Themistocles had carried his main point, the plan of campaign, but he was compelled to purchase the support of the opposition by very large concessions. Aristides and Xanthippus had been recalled and promised military and naval commands for the next year. Athens was not now completely evacuated, but a garrison was left in the acropolis—for so we may interpret the story of the 'few poor men' (Hdt. viii. 51), which seems to be a version devised to cover the failure of the defence (cf. 53, ἔδεε γὰρ κ.τ.λ.).³⁹ Themistocles doubtless was not sorry to see Athens laid in ruins. He wished to abandon the old site and transfer the city to the Piræus (cf. Thuc. i. 93, Plut. *Them.* 4, 10, 19). But the opposition, who wished Athens to be agrarian, not commercial, suspected his design and clung to the inland rock. Their scruples about an even temporary evacuation had to be soothed by the disappearance of the sacred snake, and they insisted on retaining the acropolis as a guarantee of eventual return. Aristides, τὰ πολιτικά δεινός, may also have used the crisis to extort from the government the political concessions carried through by him after the war (Plut. *Arist.* 22, cf. Aristotle, *Pol.* viii. 4, 1304, 'Aθ. πολ. 23-4), which I am inclined, in spite of the alleged dates, to interpret to mean the opening of the archonship to his Zeugite clients and the introduction of the lot. Possibly the 'strike' of the crews, met by the eight drachmae a head provided by the Areopagus, may be connected with the same agitation. The history of the struggle of parties is obscure, but the fact emerges that, as in the fabled conflict between Athena and Poseidon, the champions of land and sea were contending for the prize of Attica, and the shoot that sprang from the burnt stump of Athena's olive may have had a special significance beyond what has generally been seen in it.

The Greek fleet took up its station in the sound of Salamis, not merely, as Herodotus would have us believe (viii. 40), at the request of the Athenians, who were anxious to transport their families and property, nor in any hesitation about fighting there, but determined to bring on a decisive battle if possible. It consisted of the still seaworthy part of the ships which had fought at Artemisium, reinforced by a few fresh adherents and by such contingents as had been collected meanwhile at Pogon. The total according to Aeschylus (*Pers.* 338-40) was 300, with an additional special squadron of ten,

³⁹ See Bury in the *Classical Review*, x. (1896), pp. 416-7. His argument is perhaps open to criticism in details—the occupation of the acropolis is not quite in harmony with the decree recorded by Plutarch (*Them.* 10); the

fortnight's siege is hard to reconcile with Hdt. viii 66-70—but seems to me right in the main, and is quite borne out by a consideration of the position of parties.

and these figures, although the 300 is evidently a round number, are surely (as already argued) nearer the truth than those given by Herodotus (viii. 42-8, 82).

It is possible, however, to show how Herodotus' total, 380, may have been calculated from the basis of Aeschylus' total, 310. Aeschylus lays a stress on the separation of the ten—*δεκάς δ' ἦν τῶνδε χωρὶς ἑκκριτος*—which suggests that they played a distinct part in the naval operations. Now Herodotus assigns thirty ships to the Aeginetans, but notes that they had also other ships in commission with which they were guarding their own country (viii. 46). Pausanias (ii. 29, § 5) mentions that the Aeginetans furnished the largest contingent after the Athenian (cf. also Hdt. vii. 203). In Herodotus' list the Corinthians come next to the Athenians, with forty ships, so that the statement of Pausanias would be justified if the Aeginetans had this same number forty. Herodotus' total, exclusive of the Lemnian and Tenian vessels which came over from the enemy, is 378. But his items make only 366. It is usually held that the missing twelve are the Aeginetan extra squadron, and Stein accordingly proposes to insert *δυσκαίδεκα* at the end of the clause *ἦσαν μὲν σφί καὶ ἄλλαι πεπληρωμένοι νέες*. But obviously Cobet's suggestion, *ἄλλαι ἑ*, is far more convincing. These considerations make it probable that the ten ships of Aeschylus are to be identified with the 'other' Aeginetan ships. But the author of the computation may easily have overlooked this identity and *added* the ten Aeginetan ships to the 310 of Aeschylus, making 320. Now the difference between 320 and the 380 of Herodotus is exactly sixty, and Herodotus in vii. 168, a passage wholly disconnected with his list here, tells us that the Corcyraeans manned sixty ships to come to join the allies, but never rounded Cape Malea, because they did not wish to commit themselves to either side. However that may be, these sixty ships might not unnaturally be reckoned to the total allied fleet afloat, and account for the remaining difference between Herodotus and Aeschylus.

We have still to account for the discrepancy of two between Herodotus' items and his total. It might be suggested that he has omitted two Naxian vessels, for Plutarch (*de Her. mal.* 36) notes that Hellanicus credited 6 to the Naxians, whereas Herodotus only allows them 4 (Plutarch says 3). But all the items except the 10 Aeginetans, which is supported by or derived from Aeschylus, seem to me dubious. I prefer to say that Herodotus (or his authority) started from the total 380, deducted 12 for the Aeginetans and deserters, and then deducted the deserters by inadvertence a second time. The double deduction of these two ships would be the easier because they are mentioned very far apart, and only added to the list 34 chapters after it is completed. Herodotus may of course have had information about particular contingents, but our general conclusion is that where he has not simply repeated his figures from Artemisium, he has more or less adjusted them to make up his total of 380, which was derived from a different source.⁴⁰

⁴⁰ The question whether we ought to read *τετρακοσίας* or *τριακοσίας* in Thuc. i. 74, neither

affects the problem here nor gains any elucidation from it.

To return for a moment to the Corcyraeans—it is very remarkable that Thucydides seems studiously to ignore the story of their double dealing in the very passage (i. 31–43) where he would naturally have mentioned it. Although they never saw the enemy, and could never be inscribed on the roll of fame among the states, ὅσαι ξυγκαθελοῦσαι τὸν βάρβαρον ἔστησαν τὸ ἀντίημα, may they not have had more to say for themselves than was told to Herodotus? The subsequent neutrality of Corcyra between the Peloponnesian and Athenian leagues, like the subsequent neutrality of Argos, predisposed Herodotus and his contemporaries to see neutrality in her attitude during the Persian invasion, and such neutrality could hardly be thought to have been benevolent. But perhaps it was never in the Corcyraean bond to come up to Salamis. The possibility that the Persian admirals might detach a squadron from Euboea or Phalerum to attempt a descent on Laconia in concert with the Argives was sufficiently near to make any prudent commander anxious to keep a fleet in reserve in the south (cf. Thuc. i. 73). The Corcyraeans for their part were sufficiently remote from the Persian attack and sufficiently exposed to the Carthaginian to make them unwilling to incur liabilities in the Aegean which might hamper them in the Ionian sea. Possibly their obligations to the allies were from the first limited to the defence of the western and southern coasts of the Peloponnese.

It was doubtless the problem, how to bring the enemy's fleet to battle in the position most favourable to themselves, that chiefly occupied the council of Greek admirals at Salamis. Herodotus' account of their meetings and deliberations is more than questionable. No one who has studied his history of the war will be ready to believe that he had any intimate knowledge of the plans of the leaders. His information is entirely external, and his reports of what went on at the meetings are merely dramatic expressions of it, only a few degrees nearer to historical fact than the bedchamber counsellings of Darius and Atossa or Xerxes and Artabanus. Possibly a *mot* such as the retorts of Themistocles to Adeimantus may have become current and been remembered, but the speeches as a whole are scarcely less imaginary than those in the *Persae* of Aeschylus, and the allusions to later events can hardly be mistaken. The narrative is dominated and distorted throughout by the idea that the Peloponnesians were eager to run away to the isthmus. That idea is incredible. The arguments against retirement were as obvious as they were final. The tone of feeling in the fleet described by Aeschylus, and by Herodotus himself when he comes to the battle, is fundamentally different. The vein of spite in the story is patent. This besetting illusion of Herodotus appears to be compounded of the following elements of fact and feeling, which act and react in a complicated way on one another and on the whole narrative. First, the main source of the illusion, Themistocles' message to Xerxes. The fame and prominence of this message have had a disastrous effect on the tradition. Themistocles told Xerxes that the Greeks were bent on running away, and posterity has taken him at his word! There is a close parallel in the story of his second message (Hdt. viii. 109–10) which was evolved out of his letter to Artaxerxes (Thuc. i. 137). Second,

Athenian prejudice, which was only too eager to accept this literal interpretation so far as concerned the Peloponnesians and especially the Corinthians. Third, the natural temptation to the historian to make much of the fears of the Greeks for the sake of dramatic effect. Fourth, the popular misapprehension of the point of Themistocles' message and consequently of the battle itself. The advantage aimed at was not so much, as was afterwards supposed (Hdt. viii. 60, Thuc. i. 74), that the Greeks might fight in the narrow waters of the sound instead of the open gulf by the isthmus, but rather that they might divide the enemy's fleet, as at Artemisium, and so redress the disparity of numbers. This consideration, as soon as it is realised, brings out the full absurdity of the notion of the retirement. There are idiots and cowards in every assemblage of men, and of course there may have been some in the Greek fleet who wished to retreat. It is also likely that a rumour of such an intention was put abroad by the admirals to help Themistocles' strategem, and their repeated meetings might give colour to it. But we refuse to believe that retreat to the isthmus was ever seriously contemplated, much less deliberately voted by the council!

Herodotus' account of the meetings (viii. 49-63, 74-5, 78-83) is full of suspicious features. He describes three. The first decides on the news of the fall of the acropolis to retire to the isthmus, the second reverses this decision at the instance of Themistocles prompted meanwhile by Mnesiphilus, the third, held on the eve of the battle, is only prevented from reverting to it by the advent of Aristides with the news that retreat is now impossible. At the first the admirals, we are told, received in one breath the news of the entry of Xerxes into Attica and of the capture of the acropolis (viii. 50, 56), although (52) it held out *ἐπὶ χρόνον συχνόν*! Not only does the council decide to retreat to the isthmus, but Themistocles calmly acquiesces, and requires to be prompted by Mnesiphilus to protest! This meeting looks very much like a dramatic fiction devised on purpose to express the panic of the Greeks and to bring in Mnesiphilus. That mysterious prompter plays a part suspiciously suggestive of the detractors of Themistocles. It was a question much debated in the schools of the sophists whether *ἀρετή*, political capacity, was due to *φύσις* or to *διδασχὴ*, and Themistocles became a stock example in whom this question was 'clothed in circumstances' (v. Xen. *Mem.* iv. 2, 2, Plato, *Men.* 93, Plut. *Them.* 2).⁴¹ Doubtless his case was an echo of political controversy. Mnesiphilus represents *διδασχὴ* and the enemies of Themistocles. Thucydides on the other side, in energetic protest against the story, contends for *φύσις*, (i. 138)—*ἦν γὰρ ὁ Θεμιστοκλῆς βεβαιότατα δὴ φύσεως ἰσχυρὸν δηλώσας κ.τ.λ.*—and surely with justice. It does not enhance the credit of the episode to find that Themistocles' published arguments, as represented by the words put into his mouth by Herodotus at the second meeting, do not repeat the railing accusation of Mnesiphilus against the allies of Athens, but are of a different order and more convincing. Mnesiphilus in fact seems to

⁴¹ See Busolt's excellent note, *Griech. Gesch.* 2nd ed. ii. p. 641, with the references there given.

have proved as useful a witness against the Peloponnesians as against Themistocles.

At the second meeting, according to Herodotus, Themistocles gets his way about staying at Salamis, but only by putting pressure on Eurybiades and in spite of Adeimantus. We may conjecture that what was really discussed was the message to be sent to Xerxes. The third meeting, we are told, assembled to debate about retreat, and (on the news of the Persian movement) broke up to prepare for battle. But is it not more probable that the dispositions and preparations for the battle were the sole and original business of the meeting? The supposed motive is only Herodotus' besetting illusion once more. The dramatic element in the story is here much in evidence. It appears in the despatch of Sikinnus early in the sitting, the surrounding of the Greek fleet by the Persians in the middle of it, and the arrival of Aristides and the Tenians at the close! Herodotus brings Aristides straight back from exile, but he must really have been recalled early in the summer.⁴² Herodotus has not hitherto had occasion to mention him, but that may only mean that he has carefully been kept out of the story. The opposition to Themistocles was not likely afterwards to boast of its past attitude! Mr. Bury (*Gloss. Rev.* x. 1896, pp. 414-8) very plausibly argues that Aristides was now one of the ten *στρατηγοί*, and in command of part of the Athenian troops on the island of Salamis, which would account for his action at Psyttaleia. He ingeniously explains his escape from the Persian fleet, and arrival from Aegina, by the suggestion that he had been sent in the trireme that went to Aegina to fetch the Aeacidae.

The battle of Salamis is a difficult problem, but its difficulties are rather critical than topographical. The physical features of the scene are plain enough and have long been adequately known. The two cardinal points, the site of the town and harbour of Salamis and the island of Psyttaleia, are identified to everybody's satisfaction, and recent researches do not add much of any moment.⁴³ The Heracleum and Xerxes' throne remain doubtful. No fresh evidence identifies Keos or Cynosura, or Colias or the Temple of Athena Skiras. The Silenian shore is a little point gained, but the 'Trophy of Themistocles' and the 'Polyandrium' are not securely proved, and in any case have no bearing on the battle, for the dead would of course be taken back to the station of the fleet for burial, and the trophy might well be erected near the anchorage 'whence they sailed forth to victory' (cf. Thuc. i. 54, ii. 92). But the broad features of the topography are sufficient to check our literary authorities, and if they have not always had due weight in the estimation of the evidence, it has been rather from deficiency of imagination in the historian than from ignorance of the facts.

⁴² *Ἀθ. πολ.* 22, *ἄρχοντας Ὑψιχίδου*, cf. Plut. *Arist.* 8. Probably on the return of the expedition from Thessaly.

⁴³ On the topography cf. Lolling in *Hist. und Philol. Aufsätze E. Curtius gewidmet*, pp.

1-10; Goodwin in *Papers of the Amer. Sch. at Athens*, i. pp. 239-62; Milchhoefer, *Erlaut. Text zu Karten von Attika*, vii.-viii. pp. 26-35; Bauer, *Oesterr. Jahresh.* iv. pp. 90-111.

Of our literary sources Aeschylus, an eye-witness writing in the fresh memory of the events, is obviously the best. We may not find a systematic account of the battle in the *Persae*, but the pictures given are assuredly trustworthy so far as they go. Herodotus has collected a miscellaneous store of anecdotes, but every attentive reader must see that he has little idea of the operations as a whole. He deals in episodes and incidents such as might be picked up from floating tradition, but he scarcely attempts to understand the strategy. What general notion of the battle can be detected in his narrative appears to be ludicrously naive and entirely *a priori*. His attempts to adjust to it the details which he records can hardly be expected to be very successful or consistent. Herodotus conceives the Greeks to have been ranged along the Salaminian coast, the Persians facing them along the Attic coast—were not the Greeks in possession of Salamis, the Persians of Attica? In order to get the Persian fleet from Phalerum opposite to the Greeks he moves it up the straits on the afternoon before the battle. That he imagines the Persians to have taken up that station at that time is clear from his expressions in viii. 70—*ἀνήγον τὰς νέας ἐπὶ τὴν Σαλαμῖνα καὶ παρεκρίθησαν διαταχθέντες κατ' ἡσυχίην. τότε μὲν νυν οὐκ ἐξέχρησέ σφι ἡ ἡμέρη ναυμαχίην ποιήσασθαι· νύξ γὰρ ἐπεγένετο· οἱ δὲ παρεσκευάζοντο ἐς τὴν ὑστεραίην*. The time is late afternoon, and the word *παρεκρίθησαν* is conclusive as to the position. After the receipt of Themistocles' message therefore the Persians had only to swing round their right wing to enclose the Greeks on the west. *ἀνήγον μὲν τὸ ἀπ' ἐσπέρης κέρας κυκλούμενοι πρὸς τὴν Σαλαμῖνα* (76), and to curl up the tail of their left so as to block the channels on each side of Psyttaleia at the east end of the straits. This movement of the left is oddly described because (as has been generally recognised) Herodotus holds a brief to vindicate the veracity of Bakis, and tries to force the situation at Salamis into conformity with his oracle, which was originally invented (if my interpretation is right) to suit the Euboean conditions.

But Herodotus' conception cannot be admitted. It is hardly credible that the Greeks allowed the Persians quietly to file past the noses of their ships and take up their position at only a mile's distance. It is hardly credible that the Persians allowed the Greeks quietly to embark next morning and put to sea in their faces. But the conception is flatly inconsistent with other features of the story. Themistocles' message becomes a ridiculous farce, for when once the Persians got opposite the Greek fleet escape was impossible without a battle—there could be no question of slipping away. All the parade of secrecy, of which Herodotus' makes so much, becomes meaningless. Psyttaleia, occupied for the reason that it lay *ἐν πόρῳ τῆς ναυμαχίης τῆς μελλούσης ἔσεσθαι* (viii. 76), becomes utterly remote from the probable course of the action. Finally Herodotus' conception is hopelessly irreconcilable with the descriptions of Aeschylus. But our critical canon must be that Herodotus may be used to supplement Aeschylus, but not to contradict him, and later writers may be used to supplement both these authorities, but not to contradict them where both are consistent.

What then do we gather from Aeschylus, and how far can we supplement

his account from Herodotus or Diodorus and Plutarch? In Aeschylus there is no hint of the Persians offering battle before the advent of Sikinnus. Themistocles' messenger arrives apparently in the afternoon (*Pers.* 357), and the movement to surround the Greeks begins at nightfall after the evening meal (364-5, 375, 377-8). Herodotus would seem to have antedated the start from Phalerum to the afternoon and postdated the envelopment to midnight (viii. 70, 76). Professor Goodwin (p. 251) to save Herodotus supposes that the fleet moved out to the south-east of Salamis before the message came—to my mind an absolutely impossible interpretation of Herodotus' description of this movement in the passage (viii. 70) already discussed. Bauer (p. 100) sends the Persians inside Psyttaleia to the harbour of Piraeus, but this compromise seems to me to be no improvement. The fact is that Herodotus has simply adapted or misinterpreted his information to suit his preconceived idea of the battle.

Xerxes' order to his admirals is given by Aeschylus as follows *Pers.* 366-8):—

τάξαι νεῶν μὲν στῖφος ἐν στοίχοις τρισὶν
ἐκπλους φυλάσσειν καὶ πόρους ἰλιρρόθους,
ἄλλας δὲ κύκλῳ νῆσον Αἶαντος πέριξ.

That is to say, the mass of the fleet was to be ranged in *three* lines to guard the *three* channels, (1) between Attica and Psyttaleia, (2) between Psyttaleia and Salamis, (3) between Salamis and the Megarid, while other ships were to be stationed round about [the southern coasts of] Salamis to complete the semicircle. Probably Aeschylus pictures to himself a continuous line of ships round the outer side of the island, but a few cruisers would suffice to cut off fugitive boats or blockade-runners, and keep up communication between the main squadrons, which was all that was wanted. To these dispositions must be added what Aeschylus describes later (447-54), the occupation of Psyttaleia by a garrison of Persian troops. According to both Aeschylus and Herodotus (viii. 76) the purpose of this occupation was that the troops might rescue the friends and destroy the foes who might be driven upon the island during the coming battle. But it may be suspected that there is something of afterthought in this explanation. It may be doubted whether the Persians looked for a regular battle or any immediate fighting. All their dispositions are directed (*Pers.* 369-71, 384-5) to a blockade or siege of Salamis, and the Greek sally is not at all of the sort they had expected (391-4). The occupation of Psyttaleia would obviously much facilitate the blockade, and may be simply explained by that consideration.

All night long, if we are to believe Aeschylus (382-5), the Persian squadrons patrolled their several beats, but the Greeks made no attempt to run the blockade. Aristides must have been the last to get through, and he went in not out. At daybreak the Persians heard with consternation the paean chanted and the trumpet ring out as their enemy, still invisible [in the inner strait], put forth to battle (386-97). Suddenly the Greek fleet emerged to view [round the long eastern promontory of Salamis], the right wing leading

in orderly array (398-401). So far there has been no word of a forward movement of the Persians. They are still outside the straits south of Psyttaleia. But when the Greek fleet burst into sight, οὐκέτ' ἦν μέλλειν ἀκμή (407). With a cheer (406) they *streamed* (412, cf. 88 and Goodwin, pp. 249, 254) through the channels, and charged the enemy (408), hoping no doubt to throw them into confusion and defeat them before their rearguard had time to get clear of the inner strait. But the Greek admirals seem to have had the same idea, and carried it out with greater skill, helped perhaps by their smaller numbers and preconcerted action. They backed water (if we may here draw upon Herodotus, viii. 84) and fell back toward the northern shore, thus both gaining time for their last vessels to come out into line, and drawing the enemy on into the trap. For the Persian squadrons, entering the narrows from the open gulf with too broad a front (cf. Diod. xi. 18), fell into helpless confusion, and offered excellent chances for the Greek ramming tactics (413-6). An indescribable *mêlée* ensued. The Athenians pressed the enemy back on the west, the Aeginetai, acting perhaps in concert with their squadron outside in the gulf, worked round his right flank and cut off his retreat (417-8, cf. Hdt. viii. 85-6, 91). Yet so stubbornly did the Barbarians and their allies fight that it was only night that put an end to the battle (428), and a large proportion (probably half) of their ships were able to make their escape to Phalerum. The garrison on Psyttaleia, however, abandoned to their fate, were all shot down or hacked to pieces by the victors (454-64). According to Herodotus (viii. 95) it was Aristides who perpetrated this butchery. Some Athenian hoplites were drawn up on the shore of Salamis, probably on the eastern point of the island, where they could perform for their fellow-countrymen the same services as the troops on Psyttaleia were rendering to the Persians. Aristides, if we may accept Mr. Bury's ingenious theory, was in command of them, and doubtless saw his opportunity of claiming for his landsmen a share in the glory of the victory won by their naval rivals. As the Athenians formed the west wing of the fleet, he can have found no difficulty in getting the hoplites ferried across to Psyttaleia, where they massacred the Persians to a man.

Herodotus, apart from his general misconception of the positions and preliminary movements of the fleets, agrees very well with the version of Aeschylus. There are no contradictions in his narrative of the actual battle (viii. 83-95). The Greeks put out at daybreak. They are at once attacked by the enemy. They at first back water, then charge. The Athenians are opposed to the Phoenicians, who form the western wing of the Persian line. The Lacedaemonians are opposed to the Ionians on the eastern wing. The Lacedaemonians therefore fought on the Greek left, the Athenians on the right. Aeschylus (*Pers.* 399-400) says that the right wing led out, and we must assume that the Lacedaemonians in virtue of their hegemony led the van. But what had been the right wing in the bay of Salamis became the left in the battle, for the Greek fleet on passing the eastern cape of the island changed front and faced the south. The Aeginetai were probably with the Lacedaemonians at the eastern extremity of the line, for they station them-

selves in the channel and intercept the fugitives making for Phalerum. It seems to be implied that they had turned the enemy's right flank, and it may be conjectured that this movement of theirs decided the day, for it is the Aeginetans who receive the prize. Herodotus, like Aeschylus, emphasises the confusion into which the Barbarians fell, and his anecdotes of the various ships which encountered one another in the battle well illustrates this point.

Curiously enough it is Herodotus who has unwittingly preserved almost the only details which we can gather about what was taking place at the other end of the sound of Salamis. He retails a malicious Athenian story against Adeimantus and the Corinthians—how at the very outset of the battle they hoisted sail and made off (towards the isthmus, we must understand), and were only turned back by a mysterious barque which met them off the temple of Athena Skiras with the news that the Greeks were victorious. They then returned to the fleet at Salamis after all was over. But surely it is clear that the Corinthians were despatched towards the western strait to hold in check the enemy's squadron which had been posted there,⁴⁴ just as the fifty-three ships were sent to Chalcis from Artemisium to meet the 200 which were sailing round Euboea. Since the Corinthians claimed to have played a foremost part in the battle, and the rest of Greece (except the Athenians) admitted their claim, we may conclude that they spent the day fighting, probably against heavy odds, although possibly not alone. The scene of their action depends on the identification of the temple, which is quite uncertain. Personally I should look for it at the monastery of the Phaneromene near the ferry to Megara,⁴⁵ but a situation near or north of the island of S. George is not impossible. In this episode Herodotus has unconsciously preserved a strong confirmation of that account of the battle which we have found in Aeschylus, and a strong argument against his own conception.

Diodorus is probably following Ephorus, and Ephorus had a keen sense of the intelligible, which in spite of its occasional temptations is a valuable faculty. Accordingly Diodorus brings out clearly the three essential points: the blockade of the Megarian strait, the forward movement of the Greeks out from Salamis, and the fact that it was the attempt of the Persians to enter the sound from the open sea with too many ships abreast that threw them into confusion, and so he produces the most lucid account of any of our authorities (xi. 15–19). On the other hand, this account is simply constructed out of the materials supplied by Aeschylus and Herodotus. I doubt whether in the whole narrative there is a single new item of fact. It has been built up by reflection, inference, rationalism, and conjecture. It is in some respects an admirable piece of

⁴⁴ I am glad to see that Mr. Grundy has adopted this suggestion (*Gt. Pers. War*, p. 405). Plutarch, *de Her. mal.* 39, justly appeals to the epitaphs on Adeimantus and the Corinthians to refute the story of their flight.

⁴⁵ The passage in Plutarch, *Sol.* 9, which

might throw some light on the point is unfortunately mutilated. Solon's sham Megarians may have approached Salamis from the side of Megara. Cf. *De Her. mal.* 39, *περὶ τὰ λήγοντα τῆς Σαλαμίνιας*.

work, but it is exactly on a level with the work of a modern historian of the campaign—it is reasoned history, not independent historical evidence. The statement that the Egyptians furnished the squadron sent to the western strait is an inference from their apparent absence from the battle, just as the statement that the Cilicians, Pamphylians, and Lycians came next to the Phoenicians and Cypriotes is an application of the method of residues. Ephorus perhaps rejected the destruction of the Cilicians in Herodotus, viii. 14, and evidently reckoned the Carians with the Greek contingents. He also seems to have seen objections to the episode of the dramatic return of Aristides for he replaces him by a Samian swimmer, whom I suspect to be a conflation of Skyllias and Hegesistratus (Hdt. ix. 90–1). Diodorus is irreconcilable with Herodotus on the arrangement of the contingents on the wings of the two fleets. His reasons (if they are meant to be reasons) are arbitrary or inadequate. His tale of the losses, forty Greek ships and 200 Persian, is in itself plausible, but probably rests upon some calculation. He reckons 400 Persian ships at Mycale, and we have seen that data in Herodotus point to 600 at Salamis. At best the figures are only an estimate.

Plutarch is more likely than Diodorus to bring fresh evidence. He does add a number of details, but they are mostly of a trivial kind, and we cannot guarantee their accuracy. Is he right, for example, in shifting the exploit of Lycomedes from Artemisium to Salamis (Hdt. viii. 11, *Plut. Them.* 15)? or what is the value of the story of the sacrifice of the three captives, as to the occasion of which Plutarch does not seem to be quite consistent with himself (cf. *Them.* 13 and *Arist.* 9)? On the main features, however, he agrees well enough with Aeschylus. The channels and outer sea are occupied by Persian ships. The battle is fought in the sound, but at the eastern end of it, for the thick of the fighting is concentrated about Psyttaleia. The Barbarians struggle on till evening (*Them.* 12, 15, *Arist.* 8). On the other hand, Plutarch probably takes his 200 ships from Ephorus, although he (prudently?) does not call them the Egyptian squadron, and seems to imagine that they did all the blockading (and none of the fighting?). His most novel contribution to the story, the statement that Themistocles waited for the sea breeze before attacking, is inconsistent with Aeschylus and Herodotus, who agree that the Greeks moved out at daybreak, and may be invented on the model of Phormio's tactics in the gulf of Corinth (*Thuc.* ii. 84).

Our examination of the authorities has shown us that Herodotus has been led astray at the outset by his childish misconception of the battle, but is otherwise perfectly consistent with Aeschylus, that later writers have little or nothing to add to these two, that the account of Aeschylus was generally accepted, and that it was interpreted substantially as we have explained it. But there still remains the hardest question about the battle of Salamis—why was it ever fought at all? ⁴⁶ Granted that the Persians were no longer strong enough to contain the Greek fleet at Salamis, and at the same time detach a large part of their own to effect a diversion behind the isthmus

⁴⁶ On this question Ed. Meyer has some excellent remarks, *Gesch. d. Alt.*, iii. § 224.

from Argos, yet was it not their obvious policy to ignore the Greeks and steer straight in full force for the Peloponnese? The Greeks might follow if they pleased, but they must lose the advantage of their stronghold in the sound, and could they venture to face the undivided Persian fleet in the open sea? Clearly it was this danger that preoccupied the mind of Themistocles. His problem was not how to get the Greeks to fight at Salamis, but how to get the Persians to attack them there. It was with this object that his famous message was devised. But how came the Persian leaders, whose strategy had hitherto been irreproachably prudent and correct, to fall into the trap? Aeschylus (*Pers.* 353-4, 362) can only ascribe the blunder to divine infatuation. Herodotus in the mouths of Demaratus and Artemisia (vii. 235, viii. 68, cf. vii. 139, viii. 136, ix. 9) echoes Greek criticism. Thucydides (i. 69) suggests that Xerxes failed from his own mistakes. Was it the prospect of annihilating the Greek fleet at a blow, and getting rid of it once and for all, that tempted him? So we must conclude. But was it not easier to annihilate the Greek fleet at the isthmus? What better news could Themistocles have sent the Persian admirals than that the Greeks were bent on running away from Salamis? By all means let them go! Does not this reflection surely indicate that it was the second clause in Themistocles' message that proved so tempting a bait? The Greeks were quarrelling among themselves and a strong party of them was ready to medize on the first appearance of the Persian fleet. What party? Themistocles does not leave us in doubt, he says distinctly—the Athenians! Put into plain words his message means 'Our allies have played us false. We have already lost Attica, and now they refuse to defend our families and property in Salamis. We have had enough of them, and are anxious to make terms with you.' And, to be candid, was there not a very large element of truth in that message? I think that any one who ponders the internal political crisis at Athens, of which we have already seen evidence, and compares it with the negotiations of the next year and the intrigues of ten years before, will admit that there was real danger of that party coming into power which was opposed rather to Sparta than to Persia, which valued Attic farms more than empire overseas, and municipal liberties more than national independence. We may conjecture that both Xerxes and Themistocles had better reason to take the message seriously than is recorded in our tradition, and that there was a note of irony in Themistocles' voice as he dictated it, and remembering the price he had paid for Aristides and Xanthippus, identified himself with their policy! But the same influences, which have sharpened the one edge of the message against the Peloponnesians, have blunted the other in defence of Athens and the Alcmaeonidae.

The battle of Salamis was not in itself a crushing defeat for Xerxes, but its consequences were decisive of the whole campaign, for it meant that the Persian fleet had lost the command of the sea. Xerxes had now to think of his communications with Asia, and of the revolt which was bound to follow in Ionia so soon as a Greek squadron showed itself on the other side of the Aegean. The design of building a mole from Attica to Salamis, imputed to

him by the Greeks, is scarcely credible even as a pretence to mask his retreat (Hdt. viii. 97). Possibly the victors discovered some preparations for throwing a boom across one or more of the channels, and this fact was magnified in transmission. Possibly such words as *ἐμφράττειν* and *διαζῶσαι* (which are used by Diodorus and Plutarch *l.c.*) were too literally interpreted. Possibly the story is a mere invention on the analogy of Xerxes' other violations of Nature, the bridge over the sea and the canal through the land (cf. Isocr. *Paneg.* 89). At all events the Persian fleet at once withdrew to watch the Asiatic coasts and the Hellespont. Xerxes led back one army-corps to garrison Ionia. Mardonius was left with another in winter quarters in Thessaly to complete the conquest of Greece next year as best he could. Artabazus with the third was told off to secure the communications in Thrace and Macedonia, where there was trouble brewing.

The miseries of Xerxes' return (Aesch. *Pers.* 482-512, Hdt. viii. 115-7) offered a fine theme for rhetoric, of which the Greeks have made the most. But it was a leisurely and orderly retirement, and although there may have been some scarcity of provisions, the numbers at Mycale and under Artabazus next year (allowing for garrisons) sufficiently refute the tale of immense losses. The incident of the ice on the Strymon is an exaggeration which can be matched in the official story of Austerlitz.⁴⁷

Themistocles, we may well believe, would have pressed his victory farther and struck at once at the Hellespont. But the Athenians were not strong enough for such an enterprise without allies, and the Peloponnesian leaders were not eager to create an empire which must inevitably become Athenian (cf. Hdt. ix. 106), while their crews were doubtless anxious about next season's crops. Themistocles was afterwards fain to claim virtue for the necessity, and so gave occasion for his enemies to blaspheme.

But although Themistocles might have made more of Salamis to the advantage of Athens, the solid gain to the Greek cause may best be estimated from the fact that in the next campaign the allies assume the offensive not only by sea but also on land. As Aeschylus puts it (*Pers.* 728),

ναυτικὸς στρατὸς κακῶθεις πεζὸν ὤλεσε στρατόν.

J. A. R. MUNRO.

⁴⁷ Cf. Mr. J. H. Rose's note in the *Engl. Hist. Rev.* July 1902, pp. 537-8.

BRONZE-AGE VASES FROM ZAKRO.

[PLATE XII.]

IN describing the recent excavations at Zakro (*Annual of the British School at Athens*, vii. p. 121 ff.) I stated that the pottery found there could not be fully published yet. Pending the resumption of its study, however, three vases of exceptional excellence, which were copied in Candia by Monsieur E. Gilliéron, may be made known. One of these (No. 1) was found in fragments in the principal house (A) of the Lower Town (*ibid.* p. 129 ff.), which yielded also the hoard of sealings published in the previous issue of this *Journal*. The precise findspot was the doorway between the rooms 3 and 5 (v. plan, *ibid.* p. 131), which I believe to have contained a stairway of two flights leading to an upper level or storey. These rooms were full of collapsed ruin, among which the fragments of this vase were dispersed. I offered a special reward, and had all sherds dug out of this house minutely examined; but about a third of the vase was not recovered. Part of a second vase (lip and neck) of precisely similar character came from the same rubbish. The other two vases (Nos. 2, 3) figured in the accompanying Plate (XII.) were built up from fragments found in the Λάκκος (Pit I.) on the western spur (*ibid.* p. 126) among countless sherds of Bronze-Age pottery of the best Cnossian period.

(1) This vase stands $13\frac{1}{2}$ in. high, and is of a pinkish-yellow clay, very pure and perfectly levigated. The buff slip has been carefully polished after the firing, which was a little unequal in operation, causing the painted decoration to vary from a pale madder red to a much duskier tint. The slip is hard, but the pigment is not lustrous. The vase has no foot or flattened base and must have stood in a ring-rest; it is not pierced at the bottom, like the common 'filler' vases. The form is new among 'Mycenaean' forms, but may be traced through my vase No. 3 to a type of vessel common among 'kitchen' ware of Mycenaean period. So far as I know its graceful outlines were not exactly repeated by any later potters.¹

¹ Mr. R. C. Bosanquet, in alluding to this vase in his annual Report on Archaeology in Greece (*J.H.S.* xxi. p. 339), compared a Keftiu form temp. Dynasty xviii. If he was thinking of the slender vase which is figured

with the Keftiu tribute in the Reklmara tomb, the parallel is not very close, for that vase has a foot and no visible handle. The lip, neck, and upper part of the body, however, correspond to my vase well enough.

The decorative scheme has one obvious peculiarity, viz. the realism with which part of its constituents are treated. A Mediterranean shell is here depicted in so natural a form that there can be no doubt the vase painter had recourse to a model in nature. Hitherto we have known shells in ceramic decoration of the Mycenaean period, only in such more or less stylized and conventional treatments as are shown in Fig. 1. The *algae* also on this vase are presented as they live and sway in their native element. Nevertheless the scene is not such a realistic glimpse below sea as is suggested by the Flying-fish panel at Phylakopi (*B.S.A.* iv. Pl. 3) or the Fish fresco at Knossos (not yet published); for the stars or suns, with rays divided by circlelets, which occupy the most prominent position on the vase, are purely conventional ornament. That these are stylized presentations of celestial bodies, and not of sea-stars, may be assumed; for the artist, who drew the shells and *algae* from life, would hardly have rested content with such unreal starfishes.



FIG. 1*a*.—CONVENTIONAL TREATMENT OF A SHELL ON AN IALYSUS VASE.

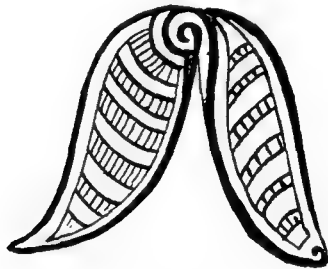


FIG. 1*b*.—CONVENTIONAL TREATMENT OF A SHELL (BIVALVE?) ON A CNOSSIAN VASE (*B.S.A.* vi. p. 74, Fig. 16).

Realism, however, in connection with the work of primitive artists, is a relative term, as we shall see presently. The aspiration towards it here is unmistakable, but the success is not so complete that one can be quite sure of the species or genus of the object represented. This shell is not a *Murra*, but is possibly of the *Purpura* family. It is less like specimens of either family, however, than it is like the common triton forms of the Mediterranean.

Very few Aegean objects have been found which show anything like even this degree of realism in the treatment of marine motives. The great bulk of the pottery with marine decoration, known to us, comes from two sites, Ialysus and Mycenae; and its motives are already stylized and conventional. The same must be said of the cuttle motive on Mycenae gold work. The main exceptions to this stylism, outside Crete, are supplied by (1) the Phylakopi Flying-fish fresco, (2) certain fine fragments of pottery with cuttle

decoration found in a streetway of the Second Town on the same site and *identical in fabric, glaze, and pigment with this Zakro vase*, (3) certain stone vases, *e.g.* from Mycenae and from Erment in Upper Egypt, which show cuttles in low relief. It is worth notice that among this small number of naturalistic representations of marine objects, some are almost certainly of Cretan origin, and all may well be so. (1) The Flying-fish fresco is put down as the work of a Cnossian artist by all who have seen both it and the Fish fresco of Cnossos. (2) The Phylakopi cuttle sherds in question are not Melian, and are almost as certainly Cretan as the 'Kamares' sherds which have been found in numbers on the same site. (3) An Upper Egypt Mycenaean vase must be held to have come from Crete more probably than from anywhere else, in view of the intimate connection between these two countries proved by the Cnossian excavations. It has been observed already that the Tell el Amarna 'Aegean' sherds correspond as a whole much more closely to ceramic types of Cnossian provenance than to any others found in the Aegean.

In Crete itself evidences of naturalistic treatment of marine motives are beginning to show themselves as unmistakably as the evidences of that naturalistic treatment of human, animal, or vegetable motives, which have already converted several scholars to the belief that the more realistic products of high art found elsewhere in the Aegean area are of Cretan origin.² We have, for example, from Cnossos a wonderful triton-shell vase in marble, the exact replica of a natural shell, and the nautilus ornament of the 'Draught-board'; a painting of fish, almost as true to life as the fish in the Punt scenes at Der el Bahari; that rudely but faithfully represented cuttle-fish which is carved in relief on the 'standard weight' (*B.S.A.* vii. p. 42, Fig. 12); many fragments of fine ceramic paintings of cuttles and *algae* (parts of a very fine cuttle vase were found in the Dictaeon Cave); and fragments of stone vases with relief decoration of cuttles. And now comes this Zakro vase.

We shall not long want, I am convinced, for more evidence on this matter. Meanwhile I put forward tentatively the suggestion that the Aegean naturalistic school of marine decoration was a Cretan, and probably in the first instance a Cnossian, school; and that it was the parent of the drier and more conventional school of Mycenae and Ialysus, which hitherto we have regarded as typical. In ceramics this school caused marine motives to be treated with the same skill and success with which geometric and vegetable motives were already being treated by the makers of the finer Cnossian vases, notably those from whose splendid fragments Mr. J. H. Marshall deduced the Cretan origin of certain vases found at Vaphio.³

(2) This vase stands 8 in. in height. The clay is both pinker and more

² *E.g.* the Vaphio goblets, and the Mycenae dagger blades and 'siege' vase, according to M. Edmond Pottier (*Revue de Paris*, March 1902, p. 175) and even more objects according to

M. Zahn (*Jahrbuch*, 1901, Anz. p. 23).

³ In a paper read before the British School at Athens in the spring of 1901, but not yet printed.

coarsely levigated than that of No. 1.; but it is pure enough. The floor of the vase is pierced for straining, as in the case of most vases of its form. It is of a typical Bronze-Age Cretan shape, characteristic of the Lower Town at Zakro (v. *B.S.A.* vii. p. 132, Fig. 43. *d.*) and of the Gournia settlement, and developed originally from the Kamares 'hole-mouth' vases. The metallic appearance of the handles usually associated with this shape also speaks to a Kamares tradition. There is nothing worthy of special remark in so much of the decoration as was laid upon this vase before the firing. After that process a floral design was painted in white upon the glaze. The applied pigment was apparently not fired, glazed, or varnished, for it may now be removed with the lightest touch of the finger.

It is the singularity and beauty of this super-decoration that makes the vase worth special notice. The plant, represented here with more than Egyptian,

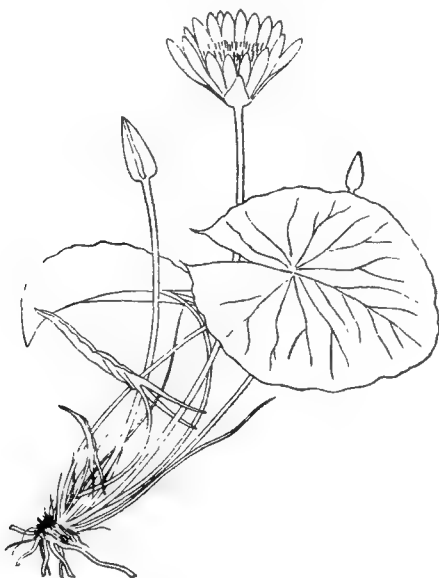


FIG. 2.—*NYMPHAEA CAERULEA* SAVIGN.

and almost Japanese, freedom is, as eminent botanists, Professor S. H. Vines and Dr. M. T. Masters, agree, a water-lily. The first named authority decided at once against *Nelumbium* and also against *Nymphaea Lotus* L., on the ground that the flowers of the latter do not project above but rest on the surface of the water; but in favour of *Nymphaea stellata* Willd. (*N. Caerulea* Savign.), whose blooms stand high above the surface (Fig. 2). Dr. Masters laid stress on the same point; and their conclusion finds itself in agreement with the contention of the author of the *Grammar of the Lotus*, who showed conclusively that the familiar 'lotus' of Egyptian designs was not *Nelumbium speciosum* Willd. (no longer found in the lower Nile lands) or indeed any true lotus, but *Nymphaea caerulea* Savign. Professor Vines

rightly adds a protest against archaeologists' carelessness in the use of the term *Lotus*, which, with a sacred association, should be confined to the rarely represented *Nelumbium speciosum*, Willd.

This development of a *Nymphaea* motive in the hands of an Aegean artist is interesting. In all probability he took it originally from Egyptian art, for *Nymphaea stellata* does not grow in arid Crete, and probably never did. Nor were the Aegean craftsmen nearly so prone to invent motives as to adopt and modify them. The Zakro painter's impulse came from such

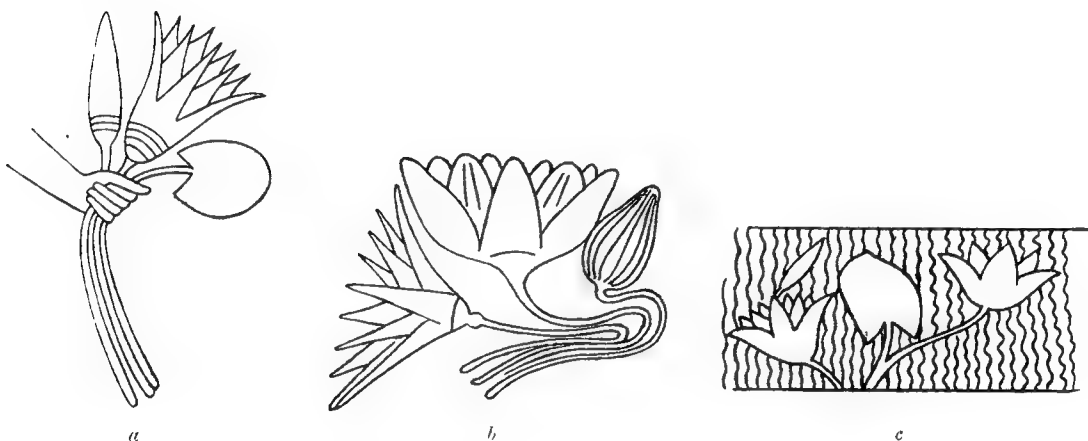


FIG. 3.—NYMPHAEA MOTIVES IN EGYPTIAN ART.

motives as I show in Fig. 3, or that which is introduced into the western central panel of the Tell el Amarna pavement. Having got the design, he wished to refer it to something in nature, but, knowing in all probability nothing of the plant from which it had originally been derived, took some field flower, perhaps a *marguerite* or corn-flower (*Centaurea Cyanus* L.) as the nearest in his experience, and modified the uncongenial stiffness of his model by introducing curves into its stems and disorder into its blooms. The original *Nymphaea*, however, has a stiff and rigid growth; and, therefore, his Aegean instinct for naturalism has led our artist not to but away from nature. The general result is a medley of realism and convention in about the same proportions as were observed in the design of the marine painter of vase No. 1. Convention has made the Zakro painter not only introduce purely formal lilies of the ordinary 'Mycenaean' type, but retain sufficient characteristics of *Nymphaea* from his Egyptian model (e.g. the long stems, the heart-shaped leaf on the left, the conical buds, and the stiff tripartite calix) for the identity of his model to be obvious. Realism, on the other hand, has led him to confound his hieratic model with a living model, and produce a plant form which never was on land or water, but grows in far more life-like fashion than the more faithful Egyptian representations of *Nymphaea*. One could hardly have a better demonstration both of the tendency which dis-

tinguished this Aegean art, especially in Crete, from the elder and parent art of Egypt, and of the limitations of a derived art from which it was by no means free.

(3) This vase stands, as restored, $7\frac{1}{4}$ in. in height. In material and fabric it is much nearer No. 1. than No. 2. The clay is levigated equally finely, but of a pinker hue. The body of the vase is overlaid with a yellow slip; but the neck is plastered with the thick creamy wash, rendered familiar by some of the finer Kamares vases (cf. *J.H.S.* xxi. Plate vi. *a*). This wash alone would indicate the Cretan origin of the vase. The body decoration of conventional white lilies on a red ground is painted on the upper part only and in large pear-shaped lozenges—a disposition not uncommon on fine vases of the good Cnossian period in Crete. The vase has no further peculiarity worth discussion. I publish it because of the excellence of workmanship and design, which raises it above its class.

D. G. HOGARTH.

FIRST REPORT OF A JOURNEY IN PISIDIA, LYCAONIA, AND PAMPHYLIA.

PART II.

I AM availing myself of the kindness of several friends and especially of Professor Ramsay's to make the following additions or corrections in Part I. In the first inscription (p. 97), line 7, the τ should have been marked doubtful; Professor Ramsay conjectures ἀθ]λοφό[ρ]ov. Line 8 should read ΝΟC and not ΜΟC. Line 10 should be deleted and the remaining lines renumbered. In line 13 (formerly 14), the Α may be an Ν. In the second inscription, line 6, the first letter had the shape of a V rather than a Υ. Professor Ramsay tells me also that, according to his drawing, the outside walls of the three shorter arms of the chapel (p. 96) were less square than I have represented them.

With reference to No. 10, it is worth while to note that the word βικάρης occurs in a Coptic *ostrakon* recently published by Mr. W. E. Crum (*Coptic Ostraca*, No. 209, cf. p. 58 of the Commentary). From what we know of the title, we should be inclined to say that this 'Eustathius of Hermonthis' (cf. also *op. cit.* No. 366) there mentioned had invoked the aid of the civil power and that 'Paul the vicarius' was a civil officer (cf. Crum *op. cit.* p. xviii.). The possibility, however, that Paul was an officer of the monastery is not excluded, and there are several considerations which would make such an interpretation suitable. The *ostrakon* is written, for instance, by 'the poor in the prison' of a monastery (that of Phoebammon, in Hermonthis), and is addressed apparently to a bishop. Paul had cast them into prison at Eustathius' instance.

Besides the inscriptions from Yonuslar published in the first part, we found there a stone (probably uninscribed) with a large Latin cross upon it. This may be the tomb of some Latin pilgrim; or, as the simple cross was often used by Latin pilgrims as their mark, it may be used as such here (cf. Langlois in *Rev. Archéol.* xiii. p. 489). The examples, however, given in our Nos. 43 and 118 prove that in earlier times no stress can be laid on the distinction in shape between Greek and Latin crosses. The present stone, which is not unlike No. 43, is probably quite a late one; perhaps as late as the Crusades.

On p. 106, Nos. 13 and 15 belong to Yenidje; No. 14 to Toldja; Nos. 39, 40 and (probably) 42 to Konia. In No. 39 the restorations Νῆ[ν]ος and

Μείρων are uncertain (read probably *Μείρω* simply): in No. 40, the word *αὐτοῦ* in the restoration should be deleted.

Before passing on to fresh inscriptions, I wish again to thank Professor Ramsay for the very great assistance he has given me in their publication. I am the more indebted to him as he has kindly allowed me to publish some of the inscriptions collected by him in his recent journey from Tarsus to Smyrna *viâ* Konia and to use some of its results.

B.—*continued.*

Konia and neighbourhood (Second Collection).

No. 60.—W.M.R.

| | |
|------------------|---|
| ΚΕΡΕΝΝΙΟΝΑ ΗΣΙΑΝ | Κ(όιντον) Ἑρέννιον Ἀ[γ]ησίαν [᾽Ονήσ-(?) |
| ΙΜΟΝ ΠΕΡΕΝΝΙΟΥ | ιμον, Π(ουβλίου) Ἑρεννίου [υἱὸν |

The restoration may be Ἀ[γ]ησιάν[ακτα ᾽Ονήσ]ιμον. In *C.I.G.* 3204 (Smyrna) we find the name Ἀ Ἑρένν(ιον) Σεπτίμ(ιον) Ἡλιόδωρον; he was also, like some other prominent athletes, a citizen of Antinoë. The name is not unknown to Iconium, for it is found in *C.I.G.* 4001 on the tomb of a woman Ἑρεννία Καισία. Her husband's name Γ. Αἴλιος (an evident mistake of the copyist for Π. Αἴλιος) can be only partially recovered. Ἑρέννιος is the Latin Herennius or Erennius, the name of a Roman plebeian gens. The name occurs six times in all in the *C.I.G.* (Asia Minor) and once in the corresponding part of the *C.I.L.*

No. 61.—In the Museum.¹ W.M.R.

| | |
|---------|-----------|
| ΘΟΥΘΟΥC | Θούθους |
| CΙΛΑΝΟΥ | Σιλανοῦ |
| ΚΑΙΕΓΝΑ | καὶ Ἑγνα- |
| ΤΙΑΜΕΝΕ | τία Μενε- |
| ΔΗΜΟΥ | δήμου |
| ΔΟΜΝΗ | Δόμνη |
| ΘΥΓΑΤΡΙ | θυγατρί |
| ΜΝΗΜΗΣ | μνήμης |
| ΧΑΡΙΝ | χάριν. |

The name *Θιουθίους* is given in Sterrett *E. J.* No. 177 (Tcharuk-Serai near Antioch). Cf. *Σούσους* (*J.H.S.* 1897. pp. 289, 295), a common name in Lycaonia and South-east Phrygia.

¹ All inscriptions given in this collection were found at Konia.

No. 62.—In the Museum. W.M.R.

| | | |
|-------------|-----|-------------------|
| II | | |
| MI | λ | Με[χαί]λ |
| λΑ | ϸ | λα[τύπο]ς |
| ΑΝ | ΗϸΑ | ἀν[έστη]σα |
| 5 ΤΗΓΛΥΚΥΤΑ | | τῇ γλυκυτά- |
| ΤΗΜΟΥCΥΜ | | τη μου συμ- |
| ΒΙΩΑΥΡdΟ | | βίω Αὐρ(ηλία) Δό- |
| ΜΝΗ ΜΝΗ | | μνη μνή- |
| ΜΗCΧΑΡΙΝ | | μης χάριν. |

If the conjecture in line 2 is right, this inscription is Jewish or Christian. For Μεχαίλ compare No. 122.

No. 63.—W.M.R.

| | |
|--------------|------------------|
| ΑΥΡ ΛΙΑΖ | Αὐρ[η]λία Δ[όμνα |
| ΑΥΡΗΛΙΩΙ | Αὐρηλίω [Νίγρ- ? |
| ΩΓΛΥΚΥΤΑΤ | ω γλυκυτάτ[ω μου |
| ΑΝΔΡΙΚΕΜΑΥΤΗ | ἀνδρὶ κὲ ἐμαυτῇ |
| ΖΩCΑΑΝΕCΤΗC | ζῶσα ἀνέστησ[α |
| ΕΝΕΚΕΝΜΝΗΜΗC | ἔνεκεν μνήμης |
| ΧΑΡΙΝ | χάριν. |

For ἔνεκεν μνήμης χάριν, cf. No. 100. The gap in l. 2 is too small to allow of the insertion of the article except with a very short personal name, such as Τᾶ.

No. 64.—On a fragment of entablature, more than five feet long. W.M.R.

ΜΕΛΕΑΓΡΟCΔΙΟΜΗΔΟΥCΑΡΧΙΕΡΕΥCΚΑΤΑΚΕΛΕΥCΙΝΤΗC
ΚΥΡΙΑCΜΗΤΡΙΖΙΖΙΜΗΝΗΕΥΧΗΝ

Μελέαγρος Διομήδους ἀρχιερεὺς κατὰ κέλευσιν τῆς
κυρίας Μητρὶ Ζιζιμηνῇ εὐχὴν.

Professor Ramsay's explanation of Zizimene as a dialectic form of Dindymene or Didymene (*Ath. Mitth.* xiii. 1888, p. 237, No. 9) has been accepted by Kretschmer (*Einleitung*, p. 196), and by J. G. C. Anderson (*J.H.S.* 1899, p. 280). The spelling Ζιζιμηνή is supported by the inscription given by the latter. This was apparently the form usual at Iconium: the more correct form Zizimene was used at Laodicea further north.

No. 65.—W.M.R.

ΛΕΥCΙΝΤΗCΘΕACΜΗΤΡΙΖΙΜ
Α ΕΠΙΕΙΕΡΕΟCΘΕΟΞΕΝΟΥ

ὁ δεῖνα κατὰ κέ]λευσιν τῆς θεᾶς Μητρὶ Ζιζιμ[μηνῇ
ἐπὶ εἰερέος Θεοξένου.

Professor Ramsay notes that the letter at the beginning of line 2 is not C, as the stone has no mark immediately below the part of it which is left; otherwise we should restore ἀνέστη]σα.

No. 65A.—Copy shown to W.M.R., 1902.

ΜΑΝΗCΠΑ
ΚΑΙΔΑCΓΥ
ΖΙΖΙΜΗ

Μάν<ι>ης Πα[σικράτους ?
κὲ [Δ]ίδας γυ[νὴ αὐτοῦ Μητρὶ
Ζιζιμμη[νῇ εὐχὴν

A bad copy of an inscription, said to have been found at a village, twelve hours towards the north of Konia. In the hope of receiving money as a guide, the owner refused to tell the name of the village.

No. 66.—In front of a mosque. W.M.R.

ΔΟΜΝΟC
ΔΙΟCΚΑΙΠ
ΛΙΩΝΥΙΟC
ΤΟΥΕΑΥΤΟΙC
ΖΩCΙ

Αὐρ(ήλιος) ?] Δόμνος [Φλά-
β]ιος καὶ Π[ολ-
λίων υἱὸς [αὐ-
τοῦ ἑαυτοῖς
ζῶσι.

Dr. Diamantides notes the letters ΦΑΛ on the right of line 1: the stone has been broken since he copied it. This inscription is given in Sterrett (*E.J.* No. 223).

No. 67.—On a round column before a mosque. W.M.R.

ΜΕΝΕΛΑΟCΚ/
ΕΡΜΟΓΕΝΗCΚΑ
ΜΕΝΕΔΗΜΟC
ΕΡΜΟΓΕΝΗΤΩΓ
ΤΡΙΚΑΙΒΑΤΗΜΗ
ΤΡΙΖΩΝΤΕCΚ
ΦΡΟΝΩΝΤΕCΜΝΗ
ΜΗCΕΝΕΚΕΝ

Μενέλαος κ[αὶ
Ἑρμογένης κα[ὶ
Μενέδημος
Ἑρμογένῃ τῷ [πα-
τρὶ καὶ Βᾶ τῇ μη-
τρὶ ζῶντες κὲ
φρονῶντες (!) μνή-
μης ἔνεκεν.

No. 68.—W.M.R.

Ρ' ΠΟΘΟΣ
 ΥΚΑΛΑ
 ΥΓΑΤΙ
 ΧΑΡΙ

Αὐ]ρ(ήλιος) Πόθος [Ἐντω-
 νί]ον Κ[α]λα[τία
 θ]υγατ[ρὶ μνή-
 μης] χάρι[ν.

The names (except Pothos) are restored merely *exempli gratia*.

No. 69.—W.M.R.

ΝΤΩΚΓΥΝΑΙΚΙΚΤΕΚΝΟΙC

Κοῖν]τῳ κὲ γυναικὶ κὲ τέκνοις.

Engraved in good letters on the right half of a large pediment.

No. 70.—In the street leading to the quarter or suburb Seidiler W.M.R., H.S.C., G.A.W.

///ΤΗCΕΝ
 ///ΝΑΝΔΡΑΑΥ
 ///CΤΑΒΙΝCΥ
 ///ΙΤΩΝΥΙΩ
 ///ΝΟΙCΤΟ

ἡ δέινα ἀνέσ]τησεν
 τὸ]ν ἄνδρα αὐ-
 τῇ]ς Τάβιν σὺ[ν
 κα]ὶ τῶν υἱῶ[ν
 κὲ ἐγγό]νοις

The stone is complete to the right. Professor Ramsay notes that in the last line between O and C the reading is not I simply, but IC or K or some letter larger than I. The dative was already passing out of use. The name Tabis or Tabeis was common in the district: examples occur in the sequel. It is undoubtedly for Tavis or Tawis, and would have been spelt, according to the usual rule, Τάουις before about A.D. 150. It is related to the city name Τάουιον or Τάβιον, which was not a Celtic but an Anatolian word, as is shown by the epithet Ζεὺς Ταηνός (for Ταφηνος). It may be regarded as probable that the Lycaonian name Tas is a shortened form of Tawis, just as the Lycaonian Ba is of Banba, Bauba, Vava or Wawa (Ramsay, *Cities and Bishoprics*, I. No. 137 and *Add.* 25; cf. however Kretschmer *op. cit.* p. 334).

No. 71.—In the Seidiler Cemetery. W.M.R., H.S.C., G.A.W.

ΚΡCΙΜΑΤΡ
 ΩΝΑΜΗ
 ΤΗΡΟΛΥΜ
 ΠΙΟΥΚΑΙ
 ΚΑΛΠΑΘΗ
 ΝΑΙΑΗΓΥΝΞ
 ΑΝΕCΤΗCΑ
 ΜΕΝΝΗΜΗC
 ΧΑΡΙΝ

Κρ(ίσπα?) Σι(λία?) Ματρ-
 ῶνα μή-
 τηρ'Ολυμ-
 πίου καὶ
 Καλπ(ουρνία) Ἀθη-
 ναία ἡ γυν[ῆ
 ἀνεστῆσα-
 μεν μνήμης
 χάριν.

I am by no means confident of the restoration of the first line. The abbreviation marks shew that the names were three in number. Crispina and Silvana may be right.

No. 72.—W.M.R.

ΔΙΩΑΝΔΙΙΚΑ
ΟΣΤΩΕΑΤΟΥΙΙ/
ΦΙΛΟΣΤΟΡΓΙΑΣΕΝΕ

[ή δείνα τῷ δεῖνι τῷ ἰ-]
δίῳ ἀνδρὶ κα[ὶ Γάι-
ος τῷ ἑατοῦ [πατρὶ
φιλοστοργίας ἔνε[κεν.

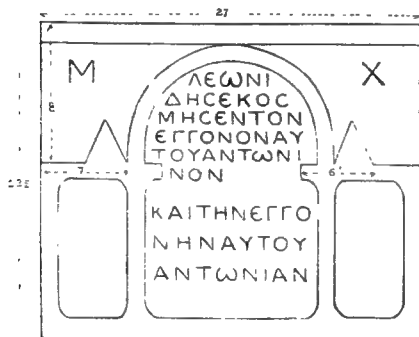
No. 73.—W.M.R.

ΙΙΙΟΣΛΟΝΓΟΣΕΑΥΤΩ
ΑΙΣΑΛΟΥΙΑΠΟΥΒΛΙΑ
ΜΟΥΚΙΛΛΗΓΥΝΑΙΚΙΑΥ
ΤΟΥΚΑΙΤΕΚΝΟΙΣΚΑΙΕΓ
ΓΟΝΟΙΣΤΗΝΛΑΡΝΑΚΑ
CYNΤ

Α]ἴλιος Λόνγος ἑαυτῷ
καὶ Σαλουία Πουβλία
Μουκίλλῃ γυναικὶ αὐ-
τοῦ καὶ τέκνοις καὶ ἐγ-
γόνοις τὴν λάρνακα
σὺν τῷ βωμῷ.

Perhaps the restoration in l. 1 should be Π. Α]ἴλιος.

No. 74.—W.M.R., H.S.C.



Λεωνί-
δης ἐκόσ-
μησεν τὸν
ἐγγονον αὐ-
τοῦ Ἀντωνί-
νον
καὶ τὴν ἐγγό-
νην αὐτοῦ
Ἀντωνίαν.

No. 75.—In the wall of a street. W.M.R.

ΟΥΑΝΓΔΛΜΟ ΗCΜΕ
ΝΕΔΗΜΟΥCΥΝΤΟΙC
ΑΔΕΛΦΟΙCΜΕΝΕΔΗ
ΩΤΩΠΑΤΡΙΚΑΙΝΙΝΕΙ
5 ΤΩΝΜΗΤΡΙΚΑΙΑΝ
ΝΑΤΗΕΑΤΩΝΛΔΕΛΦΗ
ΜΗCΕΝΕΚΕΝ

Οὐανγδ[α]μόης Με-
νεδήμου σὺν τοῖς
ἀδελφοῖς Μενεδή-
μ[ω] τῷ πατρὶ καὶ Νινεῖ
5 τῇ ἑα[τῶν] μητρὶ καὶ Ἀν-
να τῇ ἑατῶν [ἀ]δελφῇ
μνή[μης] ἔνεκεν.

This is *C.I.G.* 4003*b*, which is given from Hamilton's copy. His reading of the first line is ΟΥΑΝΓΑΛΛΟ . ΗCME. The restoration in the Corpus is Οὐα[λ](έριος) Γαλλ.....; Hamilton reads the M at the beginning of line 4 and ΤΗ ΕΑΥ at the beginning of line 5. He also reads ΕΑΥΤΩΝ in line 6 and ΜΝΗΜΗΞ ΧΑΡΙΝ in line 7. For Οὐανγδαμόης (or Οὐανγδαμόνης, for the space in line 1 may perhaps have contained a letter), compare Ὀπραμόας (Lycia), Οὐραμμόης, and Οὐανγδίβασσιν, Sterrett *E.J.* 206. Compare also Kretschmer (*op. cit.* p. 365 ff.).

In the inscription of Sterrett's, which was found at Konia and is now in the Museum, the restoration of A should be Τροκόνδας κὲ Οὐανγδίβασσιν τὰ θρεπτά, implying that two foundling children joined in erecting the tomb. The termination -βασιν or -βασσιν is Isaurian, and Professor Ramsay believes the stone comes from the north of Isauria, though it was in Konia as early as 1882. This type of sepulchral monument is certainly characteristic of the Boz-Kir district (Isaura and the surrounding country), especially on the north side and east. In B in line 1 the reading is Κ not ΚΕ; in line 2 there is a space of three letters after ΑΝΔΡΟΣ and before ΛΟΝ.

No. 76.—W.M.R.

ΣΕΛΕΥΚΟΣ ΠΑΤΡ
ΗΡΑΚΛΑΚΑΙΜΗΤ
ΚΑΛΛΙ ΠΗΑΝΕC
ΗCΑΤ////CΤΗΛΙ,!!
ΜΝΗ CΧΑΡΙΝ

Σέλευκος πατρ[ι
'Ηρακλᾶ καὶ μητ[ρ]ι
Καλλι[ό]πῃ ἀνέσ[τ]-
ησα τ[ῆν σ]τήλῃ[ν
μνή[μ]ης χάριν.

No. 77.—A tablet on a large bomos. W.M.R.

ΤΙΤΟΣ ΟΥΨΡΟΣ ΟΨ
΄ΚΑΙΑΝΘΕCΤ
΄ΓΥΝΕΚΙ

Τίτος ΟὐΨρος οὐ[Ψ]ετρα-
νὸς [ἐαυτῶ] καὶ Ἀνθεστ[ηρία τῇ
ἐαυτοῦ] γυνεκί.

The word ἐαυτῶ was omitted by the engraver.

No. 78.—At Meiram W.M.R.

ΟΥΑΛΕΡΙΟΣ
ΚΑΛΛΙCΤΕΙΝ C
ΓΥΝΕΚΙΑΥΤΟΥΔΟ
ΨΑΚΘΥΓΑΤΡΙ
ΚΛΗΜΕΝΤΕΙΝΑ

Οὐαλέριος
Καλλιστεῖν[ο]ς
γυνεκί αὐτοῦ Δ΄-
μ]να κὲ θυγατρὶ
Κλημεντεῖνα.

This is given by Sterrett (*E.J.* 219) after Dr. Diamantides. Our transcription differs considerably.

No. 79.—On a column from Meidan Eurenler. W.M.R.

| | |
|-----------|--------------|
| ΛΑ | Θέκ(?)λα |
| ΠΟΥΒΛΙ | Πουβλί- |
| ΟΥΕCΤΗCΕΝ | ου, ἔστησεν |
| ΝΕΔΡΧΟC | Νέαρχος |
| ΙΗΡΑΥΤΗC | ἀν]ήρ αὐτῆς. |

The woman's name may have been Παῦλα. As the name of the woman's father, Publius, is given, this restoration must supersede that of Sarre (*Archaeolog.-Epigr. Mitth.* xix. 1, Wien 1896, p. 31), who reads [πα]τὴρ αὐτῆς after Νέαρχος in the last line. Professor Ramsay notes that there is no trace of the Τ (see Sarre *loc. cit.*) in line 5; there is no need, therefore, for the conjecture *θρεπ*]τὴρ, which he made on reading Sarre's copy and before seeing the stone.

No. 80.—In the garden of an Armenian's house. W.M.R.

| | |
|--------------------------|-----------------------------|
| ΟΥΑΛΗC | Ουάλης |
| Κ·ΜΑΝΝΙC | κὲ Μάννις |
| ΠΑΠΠΑΥΟΙ | Παππᾶ υἱοὶ |
| ΑΝΕCΤΗCΑΝΤΕΡΤΙΑΝ | ἀνέστησαν Τερτίαν |
| ΑΑΛΛΙΑΝΤΗΝΜΗΤΕΡΑΑΥΤ[...] | Δαλλίαν τὴν μητέρα αὐτ[ῶν]. |

This inscription is given by Sterrett (*E.J.* p. 208, No. 225) from the copy of Dr. Diamantides.² It is engraved on the flat surface under the body between the fore and hind legs of a lion, which once formed the top of a small sepulchral monument. This form of monument is common in Pisidia and Isauria. For Mannis cf. Ramsay, *B.C.H.* 1883, p. 315.

No. 81.—W.M.R.

| | |
|-------------|-----------------------|
| ΛΥΡ· ΕΠΑΓΑΘ | Αὐρ(ήλιος) Ἐπάγαθ[ος] |
|-------------|-----------------------|

The name occurs in *C.I.G.* 3962c (Apamea Cibotus).

No. 82.—W.M.R.

| | |
|----------|--------------------------------|
| ΛΑΡΚΙΟ | Λάρκιο[ς] |
| ΙΩΝΕΑΥ | ζῶν ἐαυ[τῷ καὶ τῇ γυναικὶ] |
| ΠΩΣΙΛΛΗ | Πωσίλλῃ [καὶ τοῖς τέκνοις] |
| ΤΗΝCΟ | τὴν σο[ρὸν κατεσκευάσεν. |
| ΕΝΟΡΚΩ | 5 Ἐνορκῷ [δὲ Μῆνα καταχθόνιου] |
| ΚΑΙΘΕΟΥC | καὶ θεοῦς [καταχθονίους μη- |
| ΔΕΝΑΑΔΙΚ | δένα ἀδικ[ήσεν τὸ μνημα μη- |

² This (like other inscriptions) is repeated here on account of the differences between our copies and the published texts.

ΔΕΕΠΕΙΣΓ
ΑΝΕΤΕΙΣΕ
ΤΩΦΙΣΚΩ
ΠΕΝΤΑΚΟΣ
ΧΟΛΩΜΕΝΟ

δὲ ἐπεισ[ενέγκειν σώμα· ὃς δ'
ἂν ἐπεισε[νέγκῃ ἢ ἀδικήσῃ, δώσει
10 τῷ φίσκῳ [δηνάρια δισχίλια (?)
πεντακόσ[ια καὶ ἕξει Μῆνα κε-
χολωμένον].

The restoration in lines 11 and 12 may be θεοὺς κεχολώμενους.

No. 83.—In a house. W.M.R.

MENEMAXOS
ΠΑΤΡΟΚΛΕΟΥΣ
ΤΑΤΕΙΠΑΤΡΟΙ

Μενέμαχος
Πατροκλέους

Line 3 is so much cut as to be undecipherable. The restoration may be Τατεὶ Πατροκλέους τῇ ἀδελφῇ μ. χ.

No. 84.—In Armenian School-house garden. W.M.R.



Ⲫ Αὐρή[λιος Π]αῦλο-
ς Παπ[πᾶ τῷ] ἀδελ-
πῷ μ[ου γλ]υκυτά-
τῳ Ῥω[μαν]ῷ
5 σὺν τῇ [ἀδε]λπῇ
μου [Μαρκελ]λίνη
ἀνεσ[τήσ]αμεν
μνή[μης χ]άριν

This inscription is Christian and probably of a later date than 350. The restoration in line 2 may be Παπ[πᾶ τῷ] or Παπ[ύλου τῷ], if there be room for a longer restoration.

No. 85.—In a street on the way to the American Mission near a fountain. W.M.R., H.S.C., G.A.W.

ΑΦΘΟΝΟCΑΕ ΨΝ
ΝΥΜΦΩΝ ΧΟΡΟC
ΕΔΡΑΜΕΝ ΑCΤΥ

*Αφθονος ἀε[νᾶ]ων
νύμφων χορὸς
ἔδραμεν ἄστν

The stone is built in the wall upside down. The letters are of a late type. There is a hole in the stone after the ninth letter of the first line.

No. 86.—At Meiram, beside a bridge. W.M.R., H.S.C., G.A.W.

ϞDϞ
M·ALLIVS·
PALATIN·A·E·IS·
S F C

D (is) [M(anibus)]
M(arcus) Allius, M(arci) [f(ilius),
Palatina (tribu),
[p(ecunia)] s(ua) f(aciendum) c(uravit).

After the name of the tribe would follow the cognomen.

On the lower part of the same stone are the letters: lines 2 and 3 are complete on left.

AI
LIST
LI'

No. 87.—W.M.R.

| | |
|-------------|-----------------|
| AV . . . VM | Au[idi]um |
| LE Vʹ | le[gatum ei]us |
| PR PR | pr[o] pr[etore] |

The *C.I.L.* Part III. mentions two men of this name, C. Avidius Nigrinus (*C.I.L.* Part III. 567) and Avidius Quietus (355A). The latter was legatus Augusti pro praetore. He is mentioned by the younger Pliny (*Ep.* vi. 29. ix 13, 15). He was governor of Galatia in Trajan's reign, to which date this inscription must also belong.

No. 88.—In the old wall of the city. W.M.R., 1882.

ΟΥΕCΤΙΝΤΟCΗΜΑΤΟΥΤΟΕ
ΤΕΩCΟΡΘΟΔΟΞΟΥΚΕΗΘΟΥCΧΡ
ΤΗΤΟCΒΙΟΥΔΙΑΚΟΝΟCΑΙΤΟΥΡΓ
ΘΟΛΙΚΗCΕΚΛΗCΙΑCΚ//ΤΑCΤΗ
ΙΕΞΕΥΓΕΝΙCΘΙCΥΠΟΘΕΟΥΔΙ
ΟΥΤΟΚΕΤΟ//ΜΝΗΜΙΟΝΕΝ
CΚΕΥΑCΕΝΚΕΤΗΕ
ΤΙΤΛΟΝΕΥΠΟΙΗ
ΡΑΞΕΝΕΝΕΚΕΝ
ΑΡΙΝΘ

Εὐγενί(?)ου ἐστὶν τὸ σῆμα τοῦτο ἐκ
τῆς πίC]τεως ὀρθοδόξου καὶ ἡθους χρ-
ηCτό]τητος βίου διάκονος λειτουργ-
ὸς τῆς κα]θολικῆς ἐκκληCίας κ[α]τὰ [ἐ]τη
5 εἴκοC]ι ἕξ εὐγενιCθίC ὑπὸ θεοῦ δι-
ὰ τοῦτο ?] οὗτος καὶ τὸ μνημῖον ἐν-
θα ἑαυτῷ κατε]σκεύαCεν καὶ τῇ ἑαυ-
τοῦ Cυνβίβ[.] τίτλον εὐποίη-
τον ἐπεχά]ραξεν ἕνεκεν
10 εὐνοίας καὶ μνήμης χ]άριν

The inscription is complete at the top, and the right side (except l. 1) and the bottom, but it is broken on the left. This is Sterrett *E.J.* No. 200. The conjecture Εὐγενίου is supported by the εὐγενιCθίC of line 5.

No. 89.—W.M.R.

| | |
|-------------------|---|
| CHMATITΩΔΕ | σήματι τῷδε [κατάκειται |
| ΜΙΡΟΣΠΡΒCYNΑΛΟ | Μῖρος πρ(εσ)β(ύτερος) σὺν ἀλό[χῳ Λεκτ-(?) |
| ΗΠACHΠINΥTHCAO | ἡ πάσῃ πιρυτῇ σαρ[φροσύνη |
| ΚΑΛΛΙΤΕΚΑΙΕΡΓΟΙC | κάλλι τε καὶ ἔργοις [κεκασμένη |
| ΟΥΤΩCΩCΚΑΙΞΥΝ | οὕτως ὥς καὶ ξυν[ομήλικες |
| ΜΙΗΝΥΚΤΙΘΑΝΟΝ | μιῇ νυκτὶ θανόν[τες παῖδες |
| ΟΙCΤΙΤΛΟΝΕCΤΗC | οἷς τίτλον ἔστησ[αν οἱ ἀδελφοὶ (?) |
| ΑΝΤΩΝΙΟCΚΑΙΜΑΡΙ | Ἀντώνιος καὶ Μαρ[ί]α καὶ |
| ΜΟΥCΙΚΟΙCΠΕΕCCH | μουσικοῖς ἐπέεσσι [ἐπέγραψαν |
| ΟΥCΓΟΝΕΑCΤΕΙCΑΝΤΕ | τ]οὺς γονέας τείσαν τε, [τὸ γὰρ γέ- |
| ΡΑCΕCΤΙΘΑΝΟΝΤΩΝ | ρας ἐστὶ θανόντων |

The stone is complete on the left, top and bottom, but wants between one-third and a half on the right. Various efforts at the restoration of the text from Sterrett's copy (*E.J.* No. 236) have been made by Gurlitt (*Berl. Phil. Woch.* 1889, p. 23) and Zingerle (*Philologus*, 1894, p. 349), from whom we have adopted *σαο[φροσύνη]*. The inscription is in a rough metrie.

No. 90.—On a column at a fountain: letters worn. W.M.R.

| | |
|-------------------|-----------------------------|
| ΥΑΛΕΡΙΟCΦΡΟΝΩΝ | Ο]υαλέριος Φρόν[τ]ων |
| ΛΗΜΑΡCΟΥΛΛΗΥ | Φιλ[ή]τη Μαρσούλλη |
| ΕΙΩΜΕΝΖΩΝΦΡΟΝΩΝ | θ]ειῶ μὲν ζῶν φρονῶν |
| ΤΟΙ'ΑΦΟΝ ΑΙΤΟΝΕΡΙ | τὸ[ν τ]άφον [κ]αὶ τὸν περί- |
| ΒΟΛΟΝΕΧΕΙΝ | 5 βολον· ἔχειν |
| ΔΕΕΞΟΥCΙΑ | δὲ ἐξουσία- |
| ΝΤΙΝΑCΟΥ | ν ὄ]ντινα βού- |
| ΛΟΜΑΙΔΕ | λομαι δὲ |
| ΠΡΟCΟΔ | πρόσοδ- |
| ΟΝ ΕΤΑ | 10 ον [μ]ετὰ |
| ΕΚΝC | τ]έκν[ων |

The lines seem complete on right, top and bottom. The provision in l. 5-7 is common, but ungrammatically expressed. The formula *θειῶ* is more usually expressed by *καθιέρωσα* or some other similar word (cf. No. 115, *ἀπεθέωσα*). In line 1, ΝΩΝ was on the stone apparently, but perhaps Ν and Τ were ligatured; in line 2 part of the Λ remains—perhaps *τῇ φι]λητῇ*. This is given by Sterrett (*E.J.* No. 248).

On pp. 188-222 (Nos. 191-251) of his *Epigraphical Journey*, under the head *Konia*, Professor Sterrett gives a collection of sixty inscriptions³ either

³ There is no No. 205 in Sterrett.

found and copied by himself or published from the copy of Dr. Diamantides. It will illustrate the vicissitudes of inscriptions to say that of this considerable number we failed, in spite of many efforts and the offer of large rewards, to find thirty-five. The lost inscriptions are Nos. 193, 194, 195, 197, 198, 201, 202, 203, 204, 207, 208, 212, 213, 214, 215, 220, 221, 222, 224, 226, 227, 230, 231, 232, 233, 234, 235, 237, 239, 240, 241, 242, 247, 249, 250 and 251. Nos. 197 and 203, however, were found by Professor Ramsay in 1902, No. 200 in 1882, and No. 208 in 1891. It is just possible, moreover, that two or three of this number, taken from the copies of Dr. Diamantides, may be exceedingly bad and fragmentary copies of inscriptions which we have seen. On the other hand, it should be noted that of the remaining twenty-five, ten do not belong to Konia at all: Nos. 202, 216, and 217 are from Ladik; 209, 210 from a bridge on the road to Karaman; 229 from Sille; 238 from Ak Tcheshme; of Nos. 218, 243, and 245 the *provenance* is doubtful. No. 218 does not come from Konia, and Nos. 243 and 245 were copied from a book. I may add that of the inscriptions given in the *Corpus* we found hardly any. To compensate, however, this loss, we found a large number of inscriptions which are given neither by Dr. Diamantides nor by Professor Sterrett. If, therefore, inscriptions are found and soon used up, there is always good hope of finding new texts in the best known cities: *ὅλη περ φύλλων γενεή, τοιήδε καὶ ἐπιγραφῶν*.

Returning to Professor Sterrett's collection, the following corrections, which seem obviously necessary, may be added with regard to the inscriptions which we could not find.

St. No. 198. Read Ἀ[π]ωνιανός: cf. below, No. 142, Ἀππώνιος.

St. No. 202. Read Τατάδῃ and Δοδάδῃ, where *η* is used with the value *ι* in the datives of the female names Tatas and Dodas (more commonly Doudas).

St. No. 204. Read Ἐρ[μ]ο[γ]ένης ἐ[ν κα]θ[α]ρῷ τόπ[ῳ], and in line 10 f. ἔχε[ι τὸ]ν τόπον ὁπίσω τ[οῦ β]ωμοῦ.

St. No. 213. Read [. . .]ος καὶ Ἀθ[ηνί]ων κέ Βασι[λῆς οἰκογ]ενῇ αὐτοῦ. Οἰκογενής is here used much in the same sense as the more common *θρεπτός*, and the nominative plural is falsely spelt. At the end, perhaps, Βενήθῳ τε κ[ε] Λα[οδίκη] γυναικὶ αὐτοῦ.

St. No. 214. Read μονάζων for Μονᾶ ζῶν, and Πώ[λλ]ῃ in line 8. Μοῦνα, however, was a woman's name in Lycaonia, and Μόνα (genitive of Μόνας) may be right here.

St. No. 215. See above p. 119.

St. No. 218. The *provenance* of the stone is doubtful; not from Konia.

St. No. 221. Read Οὐλπεία κ[ε] Ὀνή[σιμος] ἑαυτοῖς.

St. No. 222. After ΑΥΡΗ follows I as mark of abbreviation.

St. No. 224. Read perhaps [. . .]ος κέ [Τ]άρ[σ]ιος: the physician's inscriptions were often very badly copied.

St. No. 226. Read τῇ σεμνοτάτῃ [γυναικὶ αὐ]τοῦ τὰ πέλ[τα].

St. No. 229. Published by Prof. F. Cumont in the *Byzant. Zft.* iv. p. 99: he assigns it to 1297 A.D.

St. No. 231. Read perhaps [Φλα. Με]στρια[νῶ τῷ] ἐύλαβες[τάτῳ δια-]

κόνω ἀ[ετὸ]ν ἔστησεν: it is published by MM. Radet and Paris (*B. U. H.* 1886 p. 505), who give no restoration, but a better copy than Sterrett. For ἀ[ετὸ]ν ἔστησεν, a Pisido-Isaurian formula, cf. Sterrett.

St. No. 235. Read δύο κασιγνήτοι[σ]ιν Ἀνα[στ]ασίῳ τ[ε] κ[αὶ] Θέκλῃ.

St. No. 237. Read ἐὰν δέ τις τὰς [σ]τήλ[ας] ἀδ[ικ]ήσ[ῃ] and μετὰ δὲ τὸν Ἐ[λ]ά[τ]η[ς] ? γυν[α]ικ[ός] μου θνητὸν [κὲ] ἐ[μ]οῦ, where θάνατον is evidently intended according to a common legal formula. Ἐλάτης is merely *exempli gratia*, and Ε[λ]ά[τ]η[ς] is perhaps more probable.

As to those which have been seen, the following notes are required :

St. No. 191. Read πεντακιχειλίους not πεντακισχειλίους.

St. No. 192. See above p. 124, No. 56.

St. No. 196. Correct: a few letters are now broken. Onesimus was a slave of Caesar.

St. No. 197. Seen in 1902. Correct. On Gourdos see our No. 58.

St. No. 199. Correct.

St. No. 200. See above, p. 348, No. 88.

St. No. 203. Seen in 1902; Read Περσεῖς (i.e. Persis, the wife of Menas). The inscription is one side of a small altar, on which is also represented a horseman galloping to the left, bearing a trident. The present Greeks believe that St. Menas is here represented.

St. No. 206. See above, p. 124, and p. 345.

St. No. 208. Seen in 1891 and 1902. Correct, even to the reading προσβύτερος.

St. No. 211. Correct: but it is doubtful if any letter was lost at the end of line 10. ἔχοιτο Μῆνα is possible in Phrygian Greek; cf. Ramsay, *Philologus*, 1889, p. 544 and above No. 42.

St. Nos. 216, 217. Belong to Ladik; they are engraved side by side on one stone and are published by Professor Ramsay in *Athen. Mitth.* xiii. (1888) p. 271 f. In No. 216 and No. 217 respectively the readings Γάιος and Ὀρεστίνῃ (not Ὀρεστί[δι]) are clear on the stone.

St. No. 219. See above, p. 345, No. 78.

St. No. 223. See above, p. 342, No. 66.

St. No. 225. See above, p. 346, No. 80.

St. No. 228. Correct in transcription: read ΘΕΩΝ in line 3.

St. No. 236. See above, p. 349, No. 89.

St. No. 244. Seen but not copied. The date is 1733 A.D.

St. No. 246. See above, p. 123, No. 54.

St. No. 248. See above, p. 349, No. 90.

Konia: from the Collection of Dr. Diamantides.

The following inscriptions were copied by M Sava Diamantides, government physician in Konia, where he has resided for many years.⁴ He has

⁴ I regret to learn from Professor Ramsay that he was murdered in his bed in his own house at Konia during the winter of 1901-2.

kindly allowed us to publish them. We did not think it necessary to give the epigraphic text. We print them, therefore, from his copies in transcription only, though we have tacitly introduced into them many obvious corrections. Uncials are employed where the restoration is uncertain. Many other inscriptions contained in his note-book have been copied by us from the stones themselves, often without any knowledge on our part of the existence of his copy. Wherever any indication of locality is forthcoming, we have given it; otherwise, the inscription may come from anywhere in the *Vilayet* of Konia, to the most distant parts of which his journeys extended. In the case, however, of all the inscriptions which we give here, record had been lost of the exact spot in which they were to be found, and we were unable to examine the originals for ourselves.

No. 91.—Στέφανος Δείω [υ]ίωνῳ ἀνέστησεν μνήμης) χ(άριν).

The name Δείος is found at Laodicea Combusta and Ancyra.

No. 92.—Kōnia (?).

Καλλισθένης Ἑρμ[ι]|όνῃ γυνε|κὶ γλυκυτάτῃ τη μνήμης) χ(άριν).

No. 93.—Konia (Kara-Tchigan).

Σούσους | Μενεμά|χου καὶ Χρο|νία Διομή|δει νίῳ μ(νήμης)
χ(άριν).

For Σούσους, cf. No. 61.

No. 94.—Konia (Meiram).

Τιμόθεος Ἀττάλου Δορυμέρους καὶ Ἀ[ννα ? γυνή ?
αὐτοῦ] ἐαυτοῖς ζῶντες μ(νήμης) χ(άριν).

No. 95.—Konia.

Αὐρ(ήλιος) Εὐτύχιος Ὑλας κέ
Φλά(ουιος) Κυρηακὸς Κ ἀνεστή-
σαμεν τῷ γλυκυτάτῳ [πατρὶ (?]
Εὐσεβίῳ καὶ τῇ μητρὶ
Εὐβία μ(νήμης) χ(άριν).

This must be identical with *C.I.G.* 3990 f., which gives a better transcription, and with Ramsay, *Ath. Mitt.* 1888, p. 260, No. 82. In that case it belongs to Laodicea Combusta. The name Κυριακὸς would imply Christian origin, cf. *C.I.G.* *iii* *verb.* Εὐβία, perhaps, Εὐσεβία.

No. 96.—Φλάειοι Ἀδαμάντιος ἀ-

πὸ πρωτικτόρων καὶ
Ἑσύχειος κέ Ἀρόντιος [κέ Γ-
ρη[γ]όρειος Ὀλυμπίου Ὁκ-

5 ηνοι ἀνεστήσα[μ]εν τοῖς
γλυκυτάτοις ἡμῶν γονεῦ-
σιν (!) ΑΡΟΝΟΛΚΗΕΙΩ καὶ τῇ
γλυκυτάτῃ ἡμῶν μητρὶ Δόμνῃ
μ(νήμης) χ(άριν) [κ]ὲ Δωσιθέα [Σα-

10 λωνεία Καλεντίλλα.

At the top of the inscription is the six-point star. The name given in uncials in line 7 is the name of the father. Τῇ γλ. ἡ. μητρὶ is an unnecessary repetition, being involved in γονεῦσιν (=γονεῦσιν). Perhaps we may conjecture with the aid of lines 3 and 4 Ἀρόντιος (or Ἀυρήλιος) Ὀλύμπειος for the father's name. The following points in the epigraphic text should be noted: line 1 αειοι, ΑΕΙΟΙ; line 3 κὲ Αρ, ΚΑΡ; line 4 ρη[γ], ΡΙΤ. The inscription is Christian. The restoration in line 1 may be Φλά(ουιος) Εἰού(λιος); in line 10 Βαλεντίλλα (Valentilla). For πρωτικτόρων cf. Van Herwerden, *Lexicon Graecum supplementum et dialecticum*, p. 709, and Bury, *op. cit.* ii. 557.

It is unfortunate that Dr. Diamantides had no note or memory of where he found this inscription. It contains the ethnic Ὀκηνοί. The same ethnic occurs in an inscription on a small altar brought by him to Konia from Ak-Sheher (Philomelion). This little altar has on one side a radiated bust (see above, p. 112) and on another a defaced bust above a garland, with an inscription. The inscription alone (without transcription) is published by Professor Sterrett (*E.J.* No. 155). As his copy differs very much from ours, I give it here.

ⲛⲁⲡⲟⲩⲁ
ΟΚΗΝΟC
Bust
ΔΕΙΖΕΜΕΙΑCΤΗ
ΕΥΧΗΝ

The copy is by Professor Ramsay, who notes that the letters are very faint and worn, and several are uncertain. He adds: 'In line 1, I hesitated much between Δ and Α; Sterrett has Α. There may be a letter lost at the beginning of line 2; but No. 96 defends Ὀκηνός simply. In line 3, Sterrett has ΔΕΙΖΕΜΕΤΑΕΙΝ, and he may be right about Τ for Ι: it is quite impossible now to say whether the letter was Τ or Γ or Ι. But with his copy before me, I preferred hesitatingly CΤΗ to ΕΙΝ: C especially was very doubtful.'

The transcription is perhaps [Πίν]ναρο[ς] or perhaps [Μένα]νδρο[ς] or [Ἀλεξά]νδρο[ς] Ὀκηνός Δεὶ Ζεμειάστη εὐχὴν. Oka was a village somewhere in the region of Philomelion, and doubtless on the south or east side. The travels of Dr. Diamantides did not extend north or west of that city. There was another Oka in the Hellespont district (cf. *Hist. Geography*, p. 154).

No. 97.—Konía.

ⲡ ⲉⲛⲑⲁ ⲕⲁⲧⲁⲕⲓⲧⲉ ⲟ ⲉⲛⲡⲣⲁⲕⲧⲟⲥ | Δⲟⲙⲉⲥⲧⲓⲕⲟⲥ Λⲁⲛⲕⲓⲁⲣⲓⲟⲛ
ⲟ ⲕύⲣⲓⲥ Ἰⲱάⲛⲛⲓⲥ Ἀⲟⲩⲣⲟⲥ τὴν Ἀξίⲁⲛ α[ὕ]τοῦ ο[ὕ]κ ἐπλήρωσεν
μιμορίῳ τῇ αὐ[τοῦ] συνβίου τῇ ἀθλία εὐπατρί[δ]ι. . . .

The last three letters are ΙΑΙ. αὐτοῦ in line 2 represents ΑΝΤΟΥ. The inscription is Christian, and later than Constantine. For δομέστικος, cf. Mommsen, *Ephemeric Epigraphica*, v. p. 121 *sqq.* and Bury's edition of the

Decline and Fall of the Roman Empire, ii. p. 557. For lancearii cf. *C.I.G.* 4004, and for *μιμορίω* Ramsay, *Ath. Mitth.* 1888, p. 251.

No. 98.—Konia (?)

Πεισλινιανὸς κατεσ-
κεύασεν τὴν σορὸν ἑαυτῷ καὶ
τῇ γλυκυτάτῃ μητρὶ
ἐκ τῶν ιδίων. ὃς δ' ἔαν
ἐπισβιάσητε, δώσει
θεῷ λόγον.

Probably Christian (cf. Ramsay, *Cities and Bishoprics of Phrygia*, ii. p. 497).

No. 99.—Konia.

ΑΡ^ς Μείρου
κὲ Μαρία κὲ
Δούδης ιδί-
ω πατρὶ κὲ
Σαλωνεῖ-
να σύμβιος
ἀνεστήσα-
μεν Ἀνει-
κήτω Τάτ-
τας μ(νήμης) χ(άριν).

The opening letters of line 3 are ΔΙΟΥΔ. The restoration of line 1 may be Αὐρ(ήλιος) Μείρος. Δούδης is a name common in Lycaonia. Anicetus and Salonina were parents of Doudes and the others. Evidently Christian.

No. 100.—Konia (Imam-Bagh).

Αὐρ(ηλία) Ἀσιατικὴ Ἀνει-
κήτου ἀνέστη-
σα τῷ γλυκυτάτῳ
μου νίῳ Νέωνι
καὶ ἑαυτῇ ζῶσα
ἔνεκεν μνήμης
χάριν.

No. 101.—

Αὐρ(ήλιος) Νελωνι-
ανὸς Δάου
ἑαυτῷ ζῶν-
τες (!) γυνεὶ τὸν βω-
μὸν μνή-
μ[ης] χάριν.

The name Δαὸς is found near Termessus (*C.I.G.* 4366 w). In lines 3 and 4, probably read ζῶν [κὲ] τῇ[ι] or τῆ[ι].

No. 102.—Konia?

Αὐρ(ήλιος) Μείρος Διο[γένους]
 κὲ Ἀμμία ἡ σύνβι-
 ός μου σὺν το-
 ῖς γλυκυτάτοις
 ἡμῶν υἱοῖς ἐ[ν
 εἰρήνῃ.

The letters at the end of line 5 and in the last line are ΕΥ ΕΡ. H. N.
 If our restoration is right, the inscription is either Jewish or Christian.

No. 103.—Konia.

Εὐτυχος Παπᾶ ἡρχιερα|μένος καὶ Αὐρη(λία) Ματρῶνα ἡ |
 [γυνὴ τοῦ (?)] Εὐτύχου αὐτοῖς | ζῶντες ἀνεστ[ή]σαμεν μ(νήμης)
 χ(άριν).

The letters represented by γυνὴ τοῦ are ΟΥΤΟΥ. Αὐτοῖς for ἑαυτοῖς.

No. 104.—Konia.

Δόμνης Θαλάσσου.

No. 105.—Konia.

. . . λα ἡ γυνὴ Τάνταλος
 ζῶντες.

Perhaps Παῦ]λα ἡ γυνὴ Ταντάλου.

No. 106.—Konia (Imam-Bagh).

ΕΛΕΙΟΘΕΟΥ Μεν[ν-^(?)
 έας πρεσβύτε-
 ρος υἱός Λουκί-
 ου καὶ τῇ συν-
 βίῳ μου Πατρο-
 νῇ ἀνεστήσα-
 μεν τη
 μνήμης χ-
 άριν.

For Μεννέας, cf. *U.I.G.* 3881.

No. 107.—Konia (Imam-Bagh).

Ἀλίβων
 Μείρον Ἡ-
 μιλιανῶ ὑ-
 ιῶ μνήμης
 χάριν.

The spelling η for αι is found very often in certain long inscriptions of the Praipennisos district. It marks a period as yet undetermined.

No. 108.—Konia (Imam-Bagh).

ΘΕΒΟΗΘΙΩ
 ΦΙΩΝΔΙΕΡΠ
 ΦΙΩΤ

θ(ε)έ βοήθι

No. 109.—Konia (Ketchiji).

+ | Αὐρ(ήλιος) Εὐάγριος | Δόμνου ζῶν ἀνέστησα τῷ | πάππῳ μου Εὐ-
αγρίῳ πρεσβ(υτέρῳ) | κὲ τῇ γλυκυτάτῃ μου γυνεὶ Μάσῃ κὲ τῇ ἀδελφῇ
| μου Σουσάννῃ τὸν | τίτλον τοῦτον | μ(νήμης) χ(άριν).

This is *C.I.G.* No. 3998.

No. 110.—

μνήσθητι Κ(ύρι)ε [τῆς] ψυχ(ῆς) τοῦ ὀρθοδόξου ἀφεντος
'Ιω(άννου)

Πέτρου, βωηβότα πάσης Οὐγγροβλαχίας, υἱοῦ τοῦ 'Ιω(άννου)
Μήρτζα, βωηβότα, κὲ ἐκημήθηκεν ἔτου(ς)· ,ζοξ'· ἐν μῃ(νὶ) Αὐ-
γούστῳ ιθ' κὲ ἐβασίλευεν ἔτ(η) κγ'.

βωηβότα is the Moldavian title *voivode*. The date 7077 is, presumably, of the Byzantine era, and corresponds to A.D. 1569. It is difficult, however, to fit the date in with such facts as I can collect of this period of Moldavian history, which is very complicated and obscure (cf. *The Cambridge Modern History*, pp. 82, 83). The Moldavians trimmed between their Christian and their Mahometan neighbours; and there were repeated usurpations and restorations. One is inclined to infer from the inscription, that John Peter (Ivon is a common name among the *voivodes*) sided with the Christians, and was banished in consequence to Konia. He may be identical with Peter, 'the brave *voivode* who appealed to Basil Ivanovič of Moscow against Turkey and Poland and was *voivode* when Suleiman ravaged Moldavia and took away its autonomy' (Karamzin vii, p. 161, viii, p. 21). He is, however, too early, if the date is right, and another Peter of the same dynasty, the son of John, is too late. I may note that, apparently, the first Peter succeeded in 1528, and his son Stephan in 1551: this gives Peter a reign of twenty-three years. I have to thank a friend for much of the information here given, and I regret that, in spite of his help, I have to leave the point unsettled. *Μήρτζα* is *Mircea*. This inscription has been published, I understand, in the Proceedings of the Russian Archaeological Society of Constantinople.

No. 111.—Konia (Araplar).

P(ublius) Mestrius, P(ublī) f(ilius), Maec[ianus] veteranus
[leg(ionis) VII] M(arco) Lollio, | M(arci) f(ilio), veterano
leg(ionis) septumae amico [bene merenti?] posuit

Πόπλιος Μέστριος, Ποπλίου υἱός, Μαικία[νός], οὐετρανὸς
λεγεῶνος ἐβδόμης, Μάρκῳ Λολίῳ(!), Μάρκου υἱῷ, οὐετρανῷ
λεγεῶνος ἐβδόμης, φιλοστοργίας ἔνεκεν.

No. 112.—Konia (Araplar).

Δο]ύδης Μ[ενεδήμου Πα]τροκλεῖ τῷ ἀνδρὶ | αὐτῆς τὸν
κειόνα ἀνέστησεν μ(νήμης) χ(άριν)· |
...]τος καὶ Τείμονα θρεπτοὺς αὐτοῦ | ἐλεύθερον
...]όρκίσζω δὲ Μῆνα καταχθόνιον μηδένα [ἕτερον
εἰσενεχθῆναι] εἰ μὴ μόνον τὴν δούλην [μου

No. 113.—

Καλπούριος
 τῷ ἰδίῳ πατρὶ
 Αὐρ(ηλίῳ) Παύλῳ κὲ τῇ
 ἰδίᾳ μητρὶ Αὐρ(ηλίᾳ)
 Πρεῖ[β]ι ἀνέστη-
 σα μνήμης) χ(άριν).

A cross stands above the inscription and another cross divides the first three lines of the inscription. Perhaps the last *a* of line 4 should belong to the word which follows: ?'Απρική, 'Απρίλλα or 'Απρωνία; but, more probably, the letters which stand here, ΠΡΕΙΕΙ, conceal the dative of Pribis, a common Lycæonian name; and we have so restored it.

This will be the best place to give the inscriptions which Professor W. M. Ramsay kindly sent me. Two of them belong to Konia and three to Sidirvar, a village about eight hours from Karaman on the road to Eregli. They were copied during a journey made by him in the spring and early summer of the present year from Tarsus to Smyrna. Professor Ramsay identifies Sidirvar (Sidivre in Kiepert's map) with Sideropalos.

No. 114—Konia. W.M.R., 1902.

...]ος 'Ανναῖος Ροῦφος
 Πορτωρία Μα[ρ]κέλλη τῇ γυναικὶ
 αὐτοῦ φιλοστοργίας καὶ μνήμης
 ὄνεκεν (*sic*).

The letter before]ος in line 1 may be *ι* or *τ*.

No. 115.—Konia. On a large unsmoothed bomos; rude letters. W.M.R., 1902.

Λού(κιος) Π(όρκιος?) [Φ]λάμματος
 ζῶν ἑαυτῷ καὶ τέκνοις
 Π(ορκίῳ?) Πάνσᾳ καὶ Π(ορκίῳ) Μάρκῳ
 'Ανιανὸς Μίκκαλος ἀπε-
 θέωσα τὴν λάρνακα· ὃς
 δὲ ἂν ἐπισβιάσῃται
 ὑποκείσεται φίσκῳ
 (δηνύρια), α

In line 1, W. M. Ramsay corrects *P* of his copy to *Φ*: the final *ς*, being very small, may be a punctuation mark, and he suggests Λου. Π. Φλάμμα ζῶν[τι] αὐτῷ καὶ τέκνοις... 'Α. Μίκκαλος ἀπεθέωσα (cp. above, No. 90) as the original form. One of the family, Porcius Flamma, perhaps governed Galatia about A.D. 200, and thus the name was used in Iconium.

No. 116.—Sidirvar. W.M.R., 1902.

+ ἔνθα κατάκτε Καλλ[ι]πό[δι]ς ἐπίσκοπος ἐλάχιστος

Letters rude and late. Cross and symbols over inscription, but now broken. The cross may have been Latin in form.

No. 117.—Sidirvar. W.M.R., 1902.

Τιβέριος Κλ[αύδ]ιος Διονύσ[ιος] Τιβερία Κλα[υδί]α Εὐνοία συν |
βίῳ μνήμης | χάριν

No. 118.—Sidirvar. W.M.R., 1902.

... τοῖς συγγενεῦσι (*sic*) καὶ ἀγχιστεῦσι πᾶσι ... τοῦ μνημίου
τότου (*sic*) ... βιάσ[ηται ...]αι τούτῳ καταφρονήσῃ
δη[νάρια
μύρια δισχίλια πεντακόσια.

C.—ZAZ-ED-DIN KHAN (Πρώτα Κώμη or Πρώτη Κώμη?).

Zaz-ed-Din Khan is a ruined Seljuk khan distant about four hours (twelve or fourteen miles) from Konia. Its bearing from the Ala-ed-Din mosque at Konia is 48°. From the same point the bearing of the pass by which the Konia-Obruk road crosses the Boz Dagħ is 56°. In the map which accompanies Sterrett's *Wolfe Expedition*, the road is, therefore, represented fully ten degrees south of its proper direction. The khan is on this road, which at that point lies a little west of the direct line between Konia and the pass. Before the khan fell into ruins, it was a magnificent building, the beauty of which can have been only slightly marred by the presence in its walls of stones—mouldings, pillars and such like—previously used in older buildings. Whatever other buildings may have been despoiled, it is certain, both from the character of many of the stones and from the inscriptions, that the church and grave-yard of the village have been put under contribution. This was natural, as the church, probably already in ruins when the khan was built lay close to hand. Its foundations can be traced a few yards north of the khan; and the stones it contributed are so numerous, that an architect could probably rebuild it from them. The inscriptions, which are all sepulchral, are in most cases undoubtedly Christian, and in all cases probably so.

No. 119.—W.M.R., H.S.C., G.A.W.

ΚΟΙΝΤΟΣ ΗΡΑΚΛΙΟΥ
ΠΡΩΤΟΚΩΜΗΤΗΣ CYN
ΤΗΣΥΜΒΙΩΜΑΤΡΩΝΗ
ΚΑΙΤΕΚΝΩΝΔΝΙΚΗΤΩ
5 ΚΑΙ ΚΑΤΙΛΛΗ ΟΙ ΤΕCΣΑ
ΡΙC ΕΝΘΑΔΕ ΚΕΙΝΤΕΤΥΜ
ΒΩ 1 ΗΔΑΛΟΧΟCΔΝΙΚΗΤΟΥ

Κοίντος Ἡρακλίου,
πρωτοκωμήτης, σὺν
τῇ συμβίῳ Ματρώνῃ
καὶ τέκνων Ἀνικήτῳ
καὶ Κατίλλῃ. οἱ τέσσα-
ρις ἐνθάδε κείμε τεύ-
μα· ἡ δ' ἄλοχος Ἀνικήτου

⁵ The bearing from Bunar Bashi railway station, Professor Ramsay tells me, is about 103°. I have allowed 12½ W. throughout for the variation of the compass; this particular reading was taken with a pocket-compass. This

would make the distance from the Ala-ed-Din mosque 15 miles. The first syllable of the name of the khan contains some Arabic word in a form which makes its identification impossible.

| | |
|---------------------|------------------------|
| ΒΑΣΙΛΙCΣΑ ΔΕΙΔΑΚΟ | Βασίλισσα δειάκο- |
| ΝΟC ΚΤΙCΕ ΤΥΜΒΟΝΑ | νος [ἔ]κτισε τύμβον ἄ- |
| 10 ΡΕCΤΟΝ CΥΝ ΠΑΙΔΙ | ρεστον σὺν παιδὶ |
| ΜΟΥΝΟΥΝΕΜΕΤΩ | μούνου Νεμετω- |
| ΡΙΩΝΠΙΩΟΝΤΙ | ρίῳ νηπίῳ ὄντι. |

The restoration of line 11 may be *μου Νου*<νε> *μετωρίῳ* (Latin Numitorius). The name *Βασίλισσα* is found in *C.I.G.* 3990m (probably Laodicea Combusta) and 4001b (Iconium). There is a stop, shaped like a Γ, in line 7. *Ματρῶνα* points to a connexion of some sort with Rome, though it need not be close. The genitive *τέκνων* (line 4) and *μούνου* (line 11, if the first restoration be adopted) after *σὺν* should be noted as examples of the decay of the dative inflexion. For *δειάκονος*, compare *C.I.G.* 3989f (Khatyn-Khan); for the use of the word for *διακόνισσα*, compare *C.I.G.* 3037 (Metropolis, where however the word is used in a heathen sense), *Ath.-Mittth.* 1888, p. 254, No. 65, Romans xvi. 1 (of Phoebe of Cenchrea) and *Apostolic Constitutions* ii. 26, iii. 15. The use of the Constitutions is not, however, uniform as *διακόνισσα* is found in the later parts.

From the age of her child (cf. *νηπίῳ ὄντι* in the last line) it is perhaps fair to infer that Basilissa was herself young. If that is so, a parallel for her ordination may be found in the case of the young widow, Olympias, who was ordained deaconess by Nectarius (Sozomen, *H.E.* viii. 9). This inference, however, may be wrong, as the age was fixed at forty by the council of Chalcedon (A.D. 451, c. 15), by the Trullan council (cc. 14, 40) and by Justinian (*Norell.* 123, c. 13; cf., however, vi. 6). The probability is, I think, that she was under forty. It is not impossible, moreover, that she was a deaconess before her husband's death. It is, at all events, more likely that his death rather than that of some member of his family was the immediate occasion of the erection of the monument. If its erection followed, as it probably did, close on his death, Basilissa must either have been ordained deaconess almost as soon as she became a widow, or she was one before her husband died. *Διάκονος* can hardly mean a deacon's wife.

The name *Πρώτα Κώμη* (or less probably *Πρώτη Κώμη*) has been suggested by us provisionally as the name of this village. The name *Prota* is known in Anatolia; it is, for instance, the name of an island in the Propontis, near Constantinople. The form of the name can be paralleled by *Ψερκιοκωμήτης*, *Ρεκοκωμήτης*, *Λυκιοκωμήτης*, *Λαπτοκωμήτης*, *Ὀλυμποκωμήτης*, *Δασκωμήτης*, *Καρβοκωμήτης* (cf. Ramsay *Hist. Geo.* p. 412) and others. In making this suggestion, however, we did not forget that the word may be explained on the analogy of *πρωτοπολίτης*, i.e. *πρώτος τῆς πόλεως*. The word *πρωτοκωμήτης* in such a sense occurs in Leon. Cypr. (Migne, 1725 D) and in Palladius, *Historia Lausiaca* (Migne, 1169 B). It is also found on an ostrakon (Crum, *Coptic Ostraca*, No. 131; cf. p. 28 of the Translations and Commentaries, where he is identified with the *lašane*). The use of this word in Syria and Egypt is well established. It does not occur in the *C.I.G.* though

κωμάρχης does occur twice, in *C.I.G.* 3420 (near Philadelphia) and add. 3461 b, line 66, on each occasion in the plural. *Πρώτος τῆς κώμης* also occurs, but only in inscriptions probably of later date than this.⁶ I have not come across any instance of *πρωτοκωμήτης* in Asia Minor.

No. 120.—W.M.R., H.S.C., G.A.W.

✕ΑΙΛΙΟΜΑΡΤΥΡ¹
ΕΥΔΡΟΜΙΟΥΤΩ
ΜΝΗΣΤΩΛΔΕ/
ΕΥΝΟΜΙΩΑΝΦ
ΕΝΜΝΗΗ

Αἴλιο[ς] Μ[α]ρτύρ[ιος]
Εὐδρομίου τῷ [ἀει-
μνήστῳ ἀδελ[φῷ
Εὐνομίῳ ἀνέ[στη-
σεν μνήμ]ης χάριν

This inscription is Christian. It is probably not later than Diocletian and may be earlier. The names *Μαρτύριος* (*C.I.G.* 8872, 9483) and *Εὐνόμιος* (*C.I.G.* 9267) are found in Christian inscriptions. *Εὐδρόμιος* has the appearance of a Christian name (see footnote to p. 362).

No. 121.—W.M.R., H.S.C., G.A.W.

ΤΥΜΒΟCΟΔΕΝΧΘΟΝΗΚΑΤ
ΛΥΦΙΑ//ΤΑΤΟΝΑΝΔΡΑ>ΜΕΝΕ/
ΥCΝΟCΠΑΝΤΑΘΕΟΥΒΟΥΛΕCCI
ΕΤΕΙΧΕΝ>ΑΦΝΙΟCΒΙΟΤΟΙΟ
5 ΟΥΔΟΥΛΟCΓΕΓΔΗΟC'/:ΥΤ
ΟΛΒΟΝΑΠΑΝΤΑΦΗΗC
CΕΤΥΝΒΟΝ>ΔΩCΙΕ
ΚΕΜΙΡΟCΥΙΟ
ΟCΛΕΤΟΕΙΓ

τύμβος ὃδ' ἐν χθονίῃ κατ[έχει πο-
λὺ φίλτατον ἄνδρα : Μενεδ[ήμου
ὑὸν ὃς πάντα θεοῦ βούλεσσι[ν
ἔτ' εἶχεν : ἄφνιος βιότοιο [καὶ
οὐ δούλος γεγαηός :]
ὄλβον ἅπαντα
σε τύμβον : Δωσί[θεος
κὲ Μίρος υἱό[ι

The stone is built, upside down, within the klan in a dark corner; the present right-hand lower corner of the inscription being concealed by an arch. It is in rough hexameter verse, the end of each verse (a gap in line 5) being marked. The tone appears to be Christian. For *γεγαηός*, a local form of *γεγώς*, compare the Homeric *γεγαώς*.

No. 122.—W.M.R.

ΩΝΜΗΧΑΗΛΩΠΡΩΤΙCΤΟCΕΝCΠΑΘΑΡΙΟΙCΩCΕΡΤΟΡΙΟΝ

ξ]ῶν Μηχαῖλ πρῶτιστος ἐν σπαθαρίοις

Of this inscription, Professor Ramsay notes that it was read by him with the help of a glass. The stone was very high up; there was no ladder by which it could be reached; both the limits of the stone and its precise character are, therefore, uncertain. The name *Μιχαῖλ* is common in Christian inscriptions. In *C.I.G.* 8836 (Geronta) it is the name of the *πρωτο-*

⁶ The Syrian and Egyptian authorities just quoted may well be also later than this inscription.

σπαθάριος,⁷ in whose time τὸ κáιστρον τοῦ ἱεροῦ . . . was restored. For this title πρῶτιστος ἐν σπαθαρίοις is used here, apparently *metri gratiâ*. As I hope to deal on another occasion with the position of those who held this office and offices akin to it, I will merely note here that Michael was an official of high rank at the Byzantine court, whose military duties were not necessarily more than nominal. Πρῶτιστος is common in Homer and Aristophanes.

No. 123.—W.M.R., H.S.C., G.A.W.



+MNH
MH NI
KOMA

+ μνή-
μη Νι-
κομά

The name Νικομάς is found in *C.I.G.* add 3827 x (Cotyaëum).

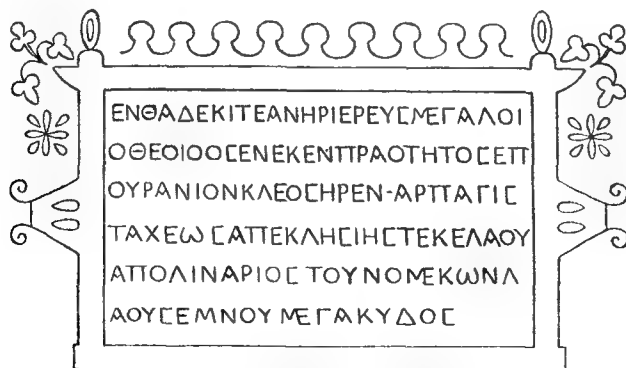
No. 124.—W.M.R., H.S.C., G.A.W.

+M N M H
ΛΑΚΟΝΟΙ
ΔΟΜΝΙΝΟ
ΕΚΚΟΥΒΙΤ
ΡΟΣ

+ μν[ι]μη
Λάκονο[ς] ?
Δομνίνο[υ]
ἐκσκουβίτ[ω]-
ρος

This inscription is Christian. The stone was the size of a man and its lower part was occupied by a cross. Ἐκσκουβίτωρ is the Latin excubitor. The ἐξκουβίτωρες were the Imperial body-guard. They were introduced by Leo I. (A.D. 457-474) in place of the scholae (Bury, *op. cit.* ii. 557).

No. 125.—W.M.R., H.S.C., G.A.W.



⁷ Is the other title, ταγματοφύλαξ, by which he is described, an error for σωματοφύλαξ? Cf. Stephanus ad πρωτοσπαθάριος.

Ἐνθάδε κῆτε ἀνὴρ, ἱερεὺς μεγάλιο θεοῖο,
ὃς ἔνεκεν πραότητος ἐπουράνιον κλέος ἦρεν·
ἄρπαγῖς ταχέως ἀπ' ἐκκλησίης τε καὶ λαοῦ
Ἀπολινάριος τοῦνομ' ἔκων, λαοῦ σέμνου μέγα κῦδος.

The spelling ἔκων for ἔχων is noteworthy.

No. 126.—W.M.R., H.S.C., G.A.W.

ΕΝΘΑΔΙΚΗΤΕΑΝΗΡΙΕΡΕΥ
ΘΕΟΙΟΟCΕΝΕΚΕΝΠΡΑΟΤΗ
ΟΝΚΛΕΟCΗΡ
ΑΠΕΚΛΗCΙΗCΤΕΚΑΙΛΑΟ
5 ΡΗΓΟΡΙΟCΤΟΥΝΟΜΕΧΩΝ
ΟΥCΕΜΝΟΥΜΕΓΑΚΥΔΟCΕ
CΙΓΗΘΟCΥΝΗΘΕΩΜΕΛΗΝ
ΝΟΝΑΝΔΡΑΖΩΝΓΑΡΑΝΕCΤΗ
ΙΤΥΝΒΩΤΩΔΕΚΑΡΑΞΕΙ

Ἐνθάδι κῆτε ἀνὴρ ἱερεὺς [μεγάλιο] θεοῖο,
ὃς ἔνεκεν πραότη[τος ἐπουράνι]ον κλέος ἦρ[εν]
ἄρπαγῖς ταχέως] ἀπ' ἐκκλησίης τε καὶ λαο[ῦ],
Γρηγόριος τοῦνομ' ἔχων, [λα]οῦ σεμινοῦ μέγα κῦδος.
ε[. . .]σι γηθοσύνηο θεῶ με[μέ]λημ[ε]νον ἀνδρα,
ζῶν γὰρ ἀνέστη[σεν ἐπ]ὶ τύνβω τ' ᾧδ' ἐκάραξεν.

In the spelling ἐκάραξεν for ἐχάραξεν, we have a parallel for the ἔκων of the last inscription, which is spelt correctly here. The last letter of line 6 may be a B. Both these inscriptions are Christian, the second one having a cross (✕) on the left.⁸ It is interesting to note the phrase ἐκκλησίης τε καὶ λαοῦ in both: it may imply that the deceased was of repute among 'those that are without,' but more probably it is the equivalent of clergy and laity. Such a distinction is of comparatively early date; so also is the use of the word ἱερεὺς for a priest. The fact that the metre, at no times smooth, is broken completely in line 4 by the names, suggests either that the tombstones, epitaphs complete, were kept ready made and the names inserted when required, or, more probably, that certain metrical epitaphs were stock property and were used as occasion arose. If we keep γηθοσύνηο and do not restore γηθοσύνης, we have a false form on the analogy of μεγάλιο.

⁸ This monogram gave place to the Constantinian $\overline{\Gamma}$ in the fourth century; cf.

Ramsay, *Cities and Bishoprics of Phrygia*, ii p. 526, No. 371; cf. also our No. 120.

No. 127.—W.M.R., H.S.C., G.A.W.

| | |
|------------------------|-------------------------------|
| ΤΙCΙΡΗΝΒΦΩΝ □ ΔΕΚΙΤΕ | τις ἱρην[ό]φρων [έν]θάδε κίτε |
| ΙΘΕΥCΧΙΙΜΟΝΙΚΑΙΠΟΛ | τ]ὸ εὐσχήμονι καὶ πολ- |
| ΥΑΛΑΝΠΟΥCΑΤΡΕΠΟΝ | ύ . λάνπουσα [π]ρέπον[τ |
| ΤΟΝΠΑΝΤΑΖΗΣΑCΑΧΕΟΝΟΝ | τὸν πάντα ζήσασα χρόνον |
| 5 ΛΙΚΗΛΙΔ ΤΟΚΑΤΑΓΝΩ | το καταγνῶν[αι |
| ΧΑΡΙCΤΑ7 ΠΥCΛΒΙΑΝ | Ε]ύσ[τ]αθίαν |
| ΠΟΛΥΤΡΟΠΟΝΕ///ΦΟΡΟΝ | πολύτροπον ἔ[ν]φορον |
| ΗΘΟCΓΕΡΑCΕ○ΧΟΥC | ἦθος, γέρας ἔχουσ[α |
| ΔΙΗΚΟΝΙΗCΕΛΑΧΕΤΙΜ | διηκονίης ἔλαχε τίμ[ην |
| 10 ΛΑΝΠΡΟΝ ΠCΤΙΑΒΟΥCΑΚ | λανπρὸν [ί]στίλβουσα κ[λέ- |
| Ω□ CΙΝΠΑΙΚΙΟΝΤΟΥΝΟΜΑΨΥ | ος . Σινπλίκιον τοῦνομα |
| CΧΗΑΔΕΛΦΗΚΕΤΕΚΝΥCΘ | ἀδελφῇ κέ τέκνυς |
| ΓΡΟΨΥC ΠΠΛΥΑΡΕΤΙΟC | πρ(ε)σβύ(τερο)ς πολυάρετος |
| CΓΩΝΑΑΓΓΑΛ^ΟΜΕΧΕ | ἐγὼ ἀγαλ[λ]ομε |

This inscription was built sideways into the inner side of the main wall of the khan. It was, therefore, in a very dark place, and it was much worn and at an uncomfortable height from the ground. Many of the letters are, therefore, uncertain. In line 1, B may be □; in line 2, the first I may be T, and the H, H; a T may stand after the last N of line 3; the E in line 4 may be a P and in line 5 the first two letters may be ΔΚ, while the space may be occupied by I or □; the last letter of the same line may be a T. Line 6 may read ΧΑΡΙCΤΑΖΩΠΥCΑΒΙΑΝ; the space in line 7 may be filled with an N. In line 8 there is a hole in the stone which extends to the upper part of line 9. In line 10 there is a mark after the second N; the second A may be Λ. The line may read ΛΑΝΠΡΟΝΙCΤΙΑΒΟΥCΑΚ. In line 11 the first I may be □ and the first three letters of line 12 may be ΟΥΝ. Line 14 may begin ΙCΓΩΝ. With this amount of uncertainty in the readings, the restoration must remain doubtful. Enough, however, can be made out to show that it is a monument to a woman and that she was also a deaconess. We had hoped to examine the inscription again, but we had not the opportunity. This imperfect copy may save the time of another traveller. It is the latest of all the inscriptions which we found at the khan.

No. 128.—W.M.R., H.S.C., G.A.W.

| | |
|----------------|--------------------|
| ΠΑCΙΚ! : ΔΟ, / | Πασικ[λής] Δο[ύδου |
| ΚΕΛCΙΝΑΘΥΓΑΤΡΙ | Κελσίνα θυγατρί |
| ΜΝΙΜΗCΧΑΡΙΝ | μνήμης χάριν. |

Below the inscription is a relief representing three figures; on the left a person seated in a high-backed chair facing right; in the centre and on the

right two other persons, standing, facing left. The restoration of the first line may be Πασικ[λῆς καὶ (or κέ)] Δό[μνα]. The name Κέλλσος occurs at Yaghli-Baiyat.

No. 129.—W.M.R., H.S.C., G.A.W.

ΑΥΡ ΠΑΥΛΑΘΥΓΑ
ΤΗΡΜΟΜΙΟΥΣΥΝΤΥ
ΣΥΙΥΣΜΟΥΟΝ
Ρ ΚΕΜ ΑΑ
ΝΕΣΤΗCΑΜΕΝΤΩ
ΓΛΥΚΥΤΑΤΩΜΟΥΚΕΠΟ
ΘΙΝΟΤΑΤΩΑΝΔΡΙ
ΔΗΜΗΤΡΙ ΜΝΗ
ΜΗCΧΑ

Αὐρ(ηλία) Παῦλα θυγά-
τηρ Μομίου σὺν τῷ-
ς υἱῷ μου Ὁν[ησάνδ-
ρ[ω] κέ Μ[αμ]ᾶ ἁ-
νεστήσαμεν τῷ
γλυκυτάτῳ μου κέ πο-
θινοτάτῳ ἀνδρὶ
Δημητρί[ω] μνή-
μης χάριν.

The name *Μαινᾶς*, given in *C.I.G.* add 3827aa (Cotyaeum), is an evident mistake for *Μαμᾶς*, cf. Kretschmer, *op. cit.* p. 338.

No. 130.—W.M.R., H.S.C., G.A.W.

ΑΡΑ
ΛΑΚ Ω
CΑΝΩΚΒΑC
CCHΚΔΙΟΓΕ
N ΜΝΗΜHC
PIN

Θέκ]λα κέ [Παύλ]ω
κέ...χ]άνω κέ Βασ-
ιλί]σση κέ Διογέ-
ν[ει] μνήμης
χάριν.

The fragment of a letter at the beginning of line 3 is not Κ. There is room for five letters before the Α, one of which would be the abbreviation for καὶ. Epitynchanos seems too long for the space in line 3.

No. 131.—W.M.R., H.S.C., G.A.W.

ΕΛΗΝΗ Ν
ΙΚΗΤΟΥΑΑ
ΞΑΝΔΡΟΥΑΔΡ
ΑΥΤΗCΚΑΙΥΩΑΥ
ΤΗCΜΝΗΜΗCΧ
ΑΡΙΝ

Σ]ελήνη Ἀν-
ικήτου Ἀλ[ε-
ξάνδρου (!) ἀδρὶ
αὐτῆς καὶ ὑφ' αὐ-
τῆς μνήμης χ-
άριν.

The copy leaves it uncertain whether there is a letter before Ε at the beginning of line 1; the arrangement of the inscription on the whole requires it. On the form ἀδρί for ἀνδρὶ see Hesychius *ad vrb.*; the form is Pamphylian.

No. 132.—W.M.R., H.S.C., G.A.W.

ΑΥΡΜΑΚΕ
ΔΟΝΙΣΜΕΙ
ΡΩΤΩΓΛΥ
ΚΥΤΑΤΗΜΟΥ
ΑΔΕΛΦΩ
ΙΩΣΗΦ
ΑΝΕΣΤΗΣΕ
ΗΜΗΧΑ
ΡΙΝ

Αὐρ(ήλιος) Μακε-
δόνις Μεί-
ρω τῷ γλυ-
κυτάτῃ μου
ἀδελφῷ
Ἰωσὴφ
ἀνέστησε
μνημῆς χά-
ριν.

Meiros was the father of Macedonius; *Μείρω* is a genitive form. For forms in *-ις* contracted from *-ιος* cf. No. 33. The inscription is Jewish or Christian.

No. 133.—W.M.R., H.S.C., G.A.W.

ΘΕ ΕΝΟC
ΜΕΝΕΔΗΜΟΥ
ΘΕΟΞΕΝΩ
ΤΩΕΓΓΟΝΩ
ΜΝΗΜΗΣ
ΕΚΕΝΚΑΙΒΑ
ΝΥΝΦΗΖΩΧΗ

Θε[όξ]εινος
Μενεδήμου
Θεοξένω
τῷ ἐγγόνω
μνήμης ἐν-
κεν καὶ Βᾶ
νύνφη ζώση.

No. 134.—W.M.R., H.S.C., G.A.W.

ΔΟΥΔΗΣ
ΑΔΙΤΩΕΙΔΙC
ΑΝΔΡΕΙΚΑΙΓΑ
ΥCΤΩΕΙΔΙΩΠΑΤ
ΗCΧΑΡΙΝ

Δούδης Ἐρ[μ]-
ᾱδι τῷ εἰδίῳ
ἀνδρεὶ καὶ Γά[ι]-
ος τῷ εἰδίῳ πατ-
ρὶ μνήμ]ης χάριν.

No. 135.—W.M.R., H.S.C., G.A.W.

Ω
ΛΙΩΝΚΕ
ΦΑΣΠΑ
ΤΡΙΚΑΙΑ
ΔΕΛΦΗ
ΠΑΠΑΔΙ
ΑΝΕCΤΗ
CΑΜΝΗ
Μ[...]/ΝΧΑΡ
ΙΝ

Αὐρ(ήλιος ?) Π]ω-
λίων Κε-
φᾶς πα-
τρὶ καὶ ἀ-
δελφῇ
Παπάδι
ἀνέστη-
σα μνή-
μ[η]ν(!) χάρ-
ιν.

The inscription is Jewish or Christian. Κεφᾶς (probably Κηφᾶς) is the father of Polio.

No. 136.—W.M.R., H.S.C., G.A.W.

ΑΓΡΙΠΙΝΑΚΑΙΖΙΒΑΧΝ

Ἀγριπῖνα καὶ Ζίβασην

For Ζίβασην compare Οὐανγδίβασσιν and Οὐάββασις (see No. 75).

No. 137.—W.M.R., H.S.C., G.A.W.

Π ΟΝ

ΚΚΙCINΑΘΥΓΑ//PI

MNHMHCHAPIN

κὲ Σισινᾶ θυγα[τ]ρὶ

μνήμης χάριν.

No. 138.—W.M.R., H.S.C., G.A.W.

ΕΝΘΑΔΕΚΕΙΤΕΑΝΗΡΠΟΛΛ
CΙΦΕΙΛΟΙCΙΠΟΘΗΤΟCΛΕΟΝΤΙΟC
ΤΟ//ΙΑΡΙCΤΟCΟ//ΕΥΕΡΓΗΜΑC Ν
ΥΠΗΡΧΕΝΑΥΤΟCΓΑΡΕΤΙΖΩΝ
ΤΥΝΒΟΝΑΝΕCΤΗCΕΜΝΑΜΑΤΙ
ΜΝΗΜΟCΥΝ

Ἐνθάδε κείμε ἀνὴρ πολλ[οί]-
σι φείλοισι ποθητὸς Λεόντιος
τοῖ ἄριστο[ς] ὁ[ς] εὐεργήμασιν (?)
ὑπῆρχεν· αὐτὸς γὰρ ἔτι ζῶν
τύνβον ἀνέστησε μνάματι
μνημοσύνης

In line 3, at the beginning, there may be no gap between Ο and Ι, and the latter part of the line is very doubtful. We have in our note-books ΕΥΕΡ-ΙΛΟΚ and ΕΥΕΡΓΗΜΑΟΚΙ, besides the copy given in the text. The objections to the restoration we give—the false use of the particle and the unknown form of the noun—are obvious. Alternative restorations—none satisfactory—are Λεόντιος [οὔ] το[ς] ἄριστο[ς] ὁ[ς] εὐεργ[εσί]ας and τ[ῶ]ν ἄριστο[ς] ἐξ εὐεργ[εσί]ας.

With regard to the metrical inscriptions published here and in Part I., we may notice that No. 58 must have been copied from a model in which the second hexameter ended in ὑψίστοιο, not ὑψίστου; and that No. 138 was probably imitated very freely from an older epigram, in which Doric forms like μνάματι were more freely used.

The stone is high up on the outside of the khan; it can be most easily read, though even then only with difficulty, by climbing out along the buttress which is near it.

No. 139.—W.M.R.

ΙΘΑ

ΔΕΚΑΤΑ

ΚΙΤΕΚΑΛ

ΛΟCΥΝΗ

ΕΥΓΝΗΣΙ

ΠΟ

CΥΝ

ΑΝ

Ἐν]θά-

δε κατά-

κιτε Καλ-

λοσύνη

5 Εὐγνησί[ου]?

πο[λιτ]-

ε]ν[ομένου]?

A large cross occupies the lower part of the monument, the upper portion dividing lines 6, 7 and 8, where the letters fail, and the cross-piece coming below line 8. It is a Christian inscription.

The discovery in one place of this number of inscriptions, most of early date, many certainly of Christian origin and none of undoubted heathen origin—No. 138 is probably no exception—presupposes the wide and early spread of Christianity in Lycaonia and Eastern Phrygia which has been argued from other evidence. It confirms the view often put forward by Professor Ramsay (cf., for example, *Hist. Geo. of Asia Minor*, p. 24) that here Christianity was Greek, and that it was not until the country became Christian that the old civilization yielded to the new. Besides throwing light on these larger problems, these inscriptions illustrate or raise several questions which concern the church discipline and organisation of Asia Minor. With regard to No. 119, the question is raised whether Basilissa was a deaconess before her husband's death and before she reached the age fixed by the councils. Nos. 125 and 126 illustrate the standard of clerical character (ἐνεκεν πραότητος) prevalent at the time and place, and most probably they also express in language the division which sprang up only too early between the clergy and the laity.

The name of the village which occupied this site is, perhaps, fixed as Πρώτα Κώμη by the word πρωτοκωμήτης, which occurs in line 2 of No. 119.⁹ The evidence, however, is very doubtful. It was on the road joining Iconium and Archelais, and in the diocese of the former. Its position on the road and near an important city would secure it, both in Roman and in Christian times, a certain measure of activity and prosperity to which its present state of ruin and desolation is an instructive contrast. It would be the first halting place on the journey from the west.¹⁰ It is likely enough that its connexion with Iconium was made closer by the establishment near it of a certain number of country seats, the property of government officials or of wealthy merchants of Iconium who retired thither in their intervals of leisure, or when their active life was ended. The ruins at all events are considerable, and the monument to Michael the Protospatharius (No. 122) is consistent with such a state of things.

D.—YAGHLI-BAIYAT (Σάουατρα).

When we were at Konia we had occasion more than once to visit the suburb Meiram, and we were told that many of the stones, with which the house of the Chelibi Effendi was built, came from a place called Yaghli-Baiyat. With the exception of one stone, which is unimportant, all the inscribed stones have been built into the wall or floor of the house face inwards. Such information about Yaghli-Baiyat as we were able to obtain at Konia or Meiram was of the vaguest kind; the only description indeed that we could

⁹ See however the notes on No. 119.

¹⁰ Hence, perhaps, Πρώτη Κώμη, though this

is even more doubtful than the other derivation of the assumed name.

obtain even of the place in which it was situated was that it was somewhere in the Boz Dagħ, and that in order to reach it we ought to follow the Obruk road. It was clear, however, that it was being used as a quarry, and we decided to make an attempt to find it.

As the rain had made the plain impassable, we went at first along some slightly higher ground to the west of the usual road to Obruk.¹¹ We joined that road, however, at Zaz-ed-Din Khan and followed it to Sindjerli Khan and to the top of the pass.

Sindjerli Khan.

Sindjerli Khan is six hours direct from Konia. As the bearing of St. Philip's, the high hill above Serai-Keui, W.N.W. of Konia, is $252\frac{1}{2}^{\circ}$, we were confirmed in our impression that there was an error in the map.¹² The ruins of a village lie about the khan; and the ground plan of its church, a building of some size, can be traced immediately to the east. The ruins have contributed the stones of which the khan is built. One inscription from Sindjerli Khan is given by Sterrett (*E.J.* No. 253). We found two others (Nos 140 and 141). The first was near the buttress on the west side and was easily accessible. The second was at the door on the south; it was built face upwards into the wall at a height of three feet, and we had to remove the stones immediately above it, before it could be deciphered.

No. 140.—W.M.R., H.S.C., G.A.W.

ΚΕΒΟΗΘΗ
ΤΑΤΗΝ

κ(ύρι)ε βοήθη
τάτην

Above the inscription is a cross, inscribed in a circle.

No. 141.—W.M.R., H.S.C., G.A.W.

ΠΑΥΛΕΙΝΑΠΑΥ
ΛΕΙΝΟΥΟΓΑΤΗΡ
ΔΙΣΑ ΛΑΡΑ
ΜΕΙ ΕΥΧΗΝ

Παυλεῖνα, Παν-
λείνου [θυ]γάτηρ,
Δι Σαλαρα-
μεῖ εὐχὴν

A relief occupies the space left blank in lines 3 and 4. Unfortunately it has been defaced. For Δι Σαλαραμεῖ, cf. Ζεὺς Βαιτοκαικεύς, (*C.I.G.* 4474, 4475, Baetocaece near Laodicaea in Syria), Ζεὺς Μεγιστεύς (add 4301d, Megiste cf. 4301 b), Ζεὺς Σολυμεύς (4366 k, Termessus) and other local deities. We may have here a key to the name of the village or district.

Doksan Dokuz Merdimenli Kuyu.

The 'well with the ninety-nine steps,' is a short distance east of Sindjerli Khan. It is described by Sterrett (*E.J.* pp. 226, 227), who has copied and

¹¹ Our guide increased our wanderings by trying to lead us to another village called Egri-Baiyat.

¹² See p. 358

published the inscription which follows. As our copy and restoration differs from his, I give it. The inscription has been defaced to the right since he saw it in 1884

No. 142.—W.M.R., H.S.C., G.A.W.

Γ Ε ΑΠΗΩΝΙΟΚΙ
ΕΙΚΟΝΙΟΥΚΑΙ ΑΙΛΙΑ
ΑΙΛΙΩΙΟΥΛΙΑΝΩΤΕΙΜΟ
ΤΟΥΓΥΝΑΙΚΙΜΝΗΜΗ
ΕΞΕΣΤ ΕΙΣΚΟΜΙΣΘΗ
ΝΙΟΥΚΑΙ ΔΙΔΩΓΥΝΑΙ

Γ(άιος) Ἀπώνιος Κ[ρίσπος δ[[
Εἰκονίου καὶ Αἰλία [Διδῶ ἢ γ[[υνὴ αὐτοῦ
Αἰλίῳ Ἰουλιανῷ Τειμο[θέῳ υἱῷ [[καὶ τῇ αὐ-
τοῦ γυναικὶ μνήμῃ[ς χάριν. [[μηδενὸς
ἔξεστ[αι] εἰσκομισθῆ[ναι] σορ[[ὸν εἰ μὴ Ἀππω-
νίου καὶ Διδῶ γυναι[κὸς] [[μόνων

I have indicated by double brackets that portion of the restoration which is without epigraphic support from either copy. In line 2 Διδῶ (not Δάδα) must be right, cf. line 6; the name occurs also in *C.I.G.*, 4124 (Galatia). In line 2 it would be simpler to restore Εἰκονίων with the title of some office before it in the previous line. Διορθωτής, δικαστής, διοικητής would hardly do, though Sterrett reads a broken Δ after Κρίσπος; perhaps, as the inscription is probably later than Hadrian, δεκουρίων or δυνδρικός might do (cf. Ramsay, *Hist. Com. on the Galatians*, p. 218, where he indicates the bearing of this restoration on the question of the constitution of Iconium).

When we had crossed the highest point in the pass by which the Obruk road traverses the Boz Dagħ, we left the road and took a rough track which led in a south-easterly direction along the top of the range. After following this track for about an hour, we came just at sunset upon a small cemetery close to the track on the right. Most of the stones in it were unengraved; in one instance, however, an inscription was legible.

No. 143A.—W.M.R., H.S.C., G.A.W.

ΓΟΡΔΙΑΝΟΣ
ΤΗΓΛΥΚΥΤΑΤΗΜΟΥ
ΣΥΜΒΙΩΓΑΕΑΝΗΥΠ
ΕΡΤΟΥΜΕΛΙΤΟΣΓΛΥΚΥΤ
5 ΑΤΗΤΗΣΥΝΖΗCΑCΑΜΟΙ
ΧΡΟΝΟΥC ΑΙΓΟΥCΕΠΙ
ΙΜΩCΚΕΤΩΥΕΙΩ
ΙΟΥΤΩΠΡΩΤΟΤΟΚ
ΑΜΒΡΟΣΙΩΤΩΔΙΧC

H.S.—VOL. XXII.

Γορδιανὸς
τῇ γλυκυτάτῃ μου
συμβίῳ Γαεανῇ, ὑπ-
ερ τοῦ μέλιτος γλυκυτ-
άτῃ, τῇ συνζησάσῃ μοι
χρόνους [ὁ]λίγους ἐπι-
τίμως, κὲ τῷ ὑεῖῳ
μου τῷ πρωτοτόκῳ
Ἀμβροσίῳ, τῷ διχ[ο-

B B

| | |
|-----------------------|---------------------------|
| 10 ΤΟΜΙICΑΝΤΙΜΕΤΟΥ | τομ[ή]σαντί με, τοῦ |
| ΤΟΛΟΕΠΟΝΖΗΝΕΙC | τὸ λοεπὸν ζῆν εἷς. |
| ΩCΓΑΡΠΕΝΤΗΚΟΝΤΑ | ὥς γὰρ πεντήκοντα |
| ΗΜΕΡΑCΠΛΗΡΩCΑCΕ | ἡμέρας πληρώσας, ἐ- |
| ΞΗΚΟΛΟΥΘΗCΕΝΤΗΜ | ξηκολούθησεν τῇ μ- |
| 15 ΤΡΙΤΗΠΑΝΜΑΚΑΡΙΤΗΕΛ | η]τρὶ τῇ πανμακαρίτῃ· ἐλ- |
| ΕΥCΟΜΕΔΕΚΑΓΩΠΡΟCΥΜΑ | εύσομε δὲ κἀγὼ πρὸς ὑμᾶ- |
| CΠΛΗΡΩCΑCΤΟΧΡΕΟCΤ | ς πληρώσας τὸ χρέος τ- |
| ΥΒΙΟΥ | ο]ῦ βίου. |

The inscription is clearly Christian; cf. the name Ἀμβρόσιος, the epithet πανμακαρίτη, and the phrases τοῦ τὸ λοεπὸν ζῆν εἷς, ἐλεύσομε δὲ κἀγὼ πρὸς ὑμᾶς and, perhaps, πεντήκοντα ἡμέρας πληρώσας. The restoration presents several difficulties of construction, ὑπὲρ τοῦ μέλιτος γλυκυτατῇ, τοῦ τὸ λοεπὸν (for λοιπὸν, cf. Γαεανῇ for Γαιανῇ) ζῆν εἷς (this phrase may have been suggested by a confused recollection of Gen. ii. 24 and Mk. x. 2-12 and parallels); the change also in line 15 is abrupt. Ἐλεύσομε δε κἀγὼ πρὸς ὑμᾶς recalls 2 Sam. xii. 23 though the Lxx. reads πορεύσομαι.¹³ Γορδιανός occurs in *C.I.G.* 5981 (Rome); Ἀμβρόσιος in *C.I.G.* 3691 (Cyzicus) and 7892 (locality unknown); the form Γαεανά is, I believe, unknown, and the name is not found in the *C.I.G.*; Γαιανός is found in *C.I.G.* 2983 (Ephesus), 4016, 4017 (both Ancyra), 4112 (Tekia) 4579 (Medschdel, Syria) and 5241 (Ptolemais). The language appears to be that of a man who did not use Greek as his native language: the tale, however, which he has to tell is clear and pathetic enough. His wife died in child-bed a year or so after marriage, and his only son died fifty days after his birth and soon after his mother's death.

This stone may have been used again as the head-stone of another grave. The following inscription, at all events, has been carved on another side.

No. 143 B.—W.M.R., H.S.C., G.A.W.

| | |
|-------------|-----------------|
| ΔΟΜΝΙΑΛΛΑΤΗ | Δόμνιλλα τη[ν] |
| ΓΑΤΕΡΑΜΝΕ | θυ]γατέρα μν[ή- |
| ΧΑΡΙΝ | μης] χάριν |

The letters are larger and, if anything, better than those used in 143 A. The resemblance between them is, however, very close. More probably, then, Domnilla was Gaiane's mother.

The light was fading rapidly when we started again on our journey after copying these inscriptions, and a storm, which fortunately passed off, was threatening. We went on in darkness for some time until the moon, then at its full, rose and aided us with its light. When we reached Yaghli-Baiyat we

¹³ With l. 4 compare γλυκυτέρω φωτὶς καὶ ζῴης in the pathetic Christian inscription of Rome, dated A. D. 239. There can be hardly any

doubt that this Lyeaoman inscription is little, if at all, later than the third century.

found not a village but a small collection of mud huts, perhaps twenty in all—a *yaila*, without inhabitants except in the summer months. Our journey from the cemetery occupied an hour and a half.

The next morning, however, left us no doubt that we were on the site of a town, once of considerable importance. The *yaila* lies almost in the centre of an amphitheatre of hills, a short way only up the slope of its eastern side. For a considerable distance in every direction—towards the west for upwards of a mile—the hills were covered with ruins. On the hill to the extreme west, called Maltepé, were the ruins of a temple. East of Maltepé, about half a mile west of the *yaila*, were the ruins of a small theatre looking east. In the low ground, immediately west of the *yaila*, we could trace along the road which led to Konia the sites of several public buildings. This road¹⁴ went south of the theatre, the road by which we had come passing north of it, below the hill on which the theatre stands.

The first inscription (No. 144) that we found was in one of the houses of the *yaila*. The title of Ancharene and her husband (ἀρχιέρεια, ἀρχιερεὺς Σεβαστῶν) confirmed the impression, which we had formed from the extent of its ruins, of the importance of the city. Only a city of good rank would have a high-priest of the Imperial cult. The stone had unfortunately been cut for building purposes, and only the upper part of the letters which gave the name of the city could be read. There is enough left, however, to place the identification of the site with Savatra practically beyond doubt. This point is discussed later.

No. 144.—W.M.R., H.S.C., G.A.W.

| | |
|-------------|-----------------|
| ANXAPHNHN | Ἀνχαρηνην |
| CAKEPΔΩΤOC | Σακέρδωτος |
| APXIEPEIAN | ἀρχιέριαν |
| CEBACTΩN | Σεβαστῶν |
| 5 ΓΥΝΑΙΚΑῶ | γυναῖκα |
| ΦΛΑΙΟΥΜΑΡ | Φλάϊου Μαρ- |
| ΚΕΛΛΟΥΑΡΧΙ | κέλλου ἀρχι- |
| ΕΡΕΟCCEBAC | ερέος Σεβασ- |
| ΤΩΝΚ//ΙΕΡΕ | τῶν κ[αὶ] ἱερέ- |
| 10 ΩCΘΕΩΝΠΑ | ως θεῶν πα- |
| ΤΡ////ΑΡΕΩC | τρ[ίων] Ἀρεως |
| ΚΑΙΑΡΕΙΩΝ | καὶ Ἀρείων |
| ΤΗΝΠΑΝΑΡΕ | τὴν πανάρε- |
| ΣΟΥΑΤ | τον] Σ[α]ουατ- |
| | [ρέων βουλὴ |
| | δῆμος] |

¹⁴ See p. 374.

The letters **ΙΩΝ** probably occupy the space in line 11, though we could not be altogether certain of the reading. The name of the city making the dedication would be expected in line 15. Though the possibility of the site being Savatra was suggested by Professor Ramsay and discussed by us on the spot, the resemblance of these scraps of letters to the upper portions of the opening letters of the name of that city was not noticed until our return to England.¹⁵ The name *Ἀγχάρηνος* occurs in *C.I.G.* 6829 (the precise locality in which this inscription was found is uncertain, but it was somewhere in Asia Minor: it is a dedication to Severus and Julia, *μήτηρ στρατοπέδων*: Ancharene was an Ephesian and archon at the time that it was set up). *Σακέρδω*s is found in *C.I.G.*, 3882 *g* (near Afion Kara-Hissar; *Τινήσιος Σακέρδω*s was consul in 219 A.D.; this inscription also honours Julia Domna, *μήτηρ κύστρων*, cf. *C.I.Alt.* 1055). 3953 (Attudae, Phrygia), 4351 (Side; *Σακέρδω*s is described as *ὑπατικός* and as *πατρίκιος* *ποντίφεξ*), add. 4380 *l*² (Cibyra, A.D. 180; Sacerdos had been thrice *γραμματεὺς*), and 5830 (Naples—the connexion with Asia Minor is maintained for *Ἐννεπῆς Σακέρδωτος ναύκληρος* is described as *Κ[ω]ρυκιώτης*, i.e. Crete or more probably Cilicia). The word *πανάρετον* occurs in the next inscription but two (No. 147), and in Nos. 4150 (Amastris), 4415 *b* (? Iotape) and 6650 (Rome) of the *C.I.G.* The use in 4413 *c* (Iotape), *προγόνων παναρέτων καὶ δεκαπρώτων* is interesting. The epithet appears to refer to social position rather than moral qualities.

No. 145.—W.M.R., H.S.C., G.A.W.



Tito Servaeo Sabino,
 p(rimi) p(ili), donato omnibus
 donis, L(ucius) Servaeus
 Sabinus, centurio leg(ionis) sextae Vict(ricis),
 patri suo fecit.

The trophies consist of a cuirass, a head-dress, and three spears, represented conventionally.

¹⁵ It is perhaps well to add that we examined the remains of these letters very carefully and without allowing any theory of their meaning to influence us.

No. 146.—W.M.R., H.S.C., G.A.W.

ΟΥΤΕΣΕΡΟ

On a large block of stone, letters 4" high.

No. 147.—W.M.R., H.S.C., G.A.W.

| A | B | C |
|-----------------------------|---------|------------|
| Κ. ΙΟΥΛΙΤΤΗΓΥΝΑΙΚΙ ΠΑΝΑΡΕΤΩ | ΝΔΡΩΠΕΙ | ΗΙΣΤΡΑΤΟ |
| ΝΕΙΚΗΗΜΗΤΗΡΑΥΤΗΣΚΑ'Κ ΚΕΛ | ΤΚΙΟ | ΜΕΑΥΤΩΟΚΕΛ |
| ΣΟΣΜΟΝΟΙΣΤΗΝΑΑ ΝΑΚΑΜ | ΓΛΕΠΑ | Ι:ΣΕΝΝΕΑΜΗ |
| ΝΑΣ ΚΤ ΝΟΙΣΜΗΔΕ | | |

Κ(ούνη) Ἰουλίττη γυναικὶ παναρέτω...[καὶ ἡ Ἀλεξία ἡ δὲ...η Ἰστρατο-
νείκη ἡ μήτηρ αὐτῆς καὶ Κιόντος] Κέλ[σος.....καὶ αὐτῶ ὁ Κέλ-
σος μόνοις τὴν λυ[ρ]νακα..... ..έννέα μῆ-
νας κ[ε] τ[έκ]νοις μηδέ.....

This is on the right side of a sarcophagus lid now broken into three pieces. On the lid is the marble figure of a woman reclining on her left elbow. The pieces measure on the right side 2'8½", 2'0", and 1'8"; the writing occupies 2'3", 2'0" and 11". It was impossible to determine the probable number of letters lost to the right and left of B; but the three fragments were parts of a continuous inscription. For Κέλσος, cf. *C.I.G.* 3997 (Iconium), and *C.I.L.* Pt. III. 250 : this Celsus was legatus Augusti pro praetore of Galatia). For Ἰουλίττη, cf. *C.I.G.* 4056 (Ancyra) and add. 4062. The name Stratonice occurs in 4003 (Iconium), in 4068 and 4070 (Ancyra) and is not infrequent elsewhere.

Before describing the route by which we returned, or attempting to justify at any length the identification of this site with Savatra it will be convenient to give the two inscriptions which we copied on our way back to Konia. The first (No. 148) we found in a small cemetery about an hour and a half from Yaghli-Baiyat; the second (No. 149) is on a sarcophagus which forms a cistern for a khan, four miles east of Konia. The name of the khan is Khan Sakyatan Musli. Neither inscription is of much importance.

No. 148.—An hour and a half from Yaghli-Baiyat. W.M.R., H.S.C. G.A.W.

CHNIEPHNKEΦA
ΕΠΤΑΚΑΙΔΕΚΑ
ΑΕΤΙΕΤΕΚΟΣΕΘΑ
ΡΗΤΡΗCΕΝΤΑΡCΟΙCΟΙC
ΠΥΡCΟCΩCΝΑΥΤΗCΙΝΑΓΑΛΛΟ
CΒΕCΘΙCΤΟΝCΚΟΤΗCΑΜΗC
ΩΕΑΡΙCΤΟΦΑΝΙ ΤΕΚΑ/ΕΛΠΙΔΩ
ΟΙC ΜΟΥΝΟΙC CΤΕΝΑ ΟΝΕΑ

CHNAPETHN PANAPOTMEKACIGNI
 MIATIA DOYATA LOYEPTA ET OYCFE
 EINEKAC OYMHTEPMENEC AEIDOCYX
 ENDEPATHEPKOYPOICEΔPAKEΔAKPY

Σὴν ἱερὴν κεφαλ[λὴν
 ἑπτακαίδεκα[ετοῦς
 Ἀέτιε, τέκος ἐσθλ[όν
 ῥήτρης ἐν ταρσοῖς οἷς
 πυρρὸς ὡς ναύτησιν ἀγαλλ[ομένοισι πέφανται,
 σβεσθίς τὸν σκοτίης
 ὡς Ἀριστοφάνι τε κα[ὶ] Ἑλπιδίῳ
 οἷς μούνοις στενα[γμῶν]
 σὴν ἀρετὴν, πανάποτμε, κασιγν[ήτω
 Μιλτιάδου Ἀτάλου ἑπταετοῦς
 εἵνεκά σου μήτηρ μὲν ἐς Ἀεῖδος ἡῤ[ατο βῆναι
 ἐν δὲ πατὴρ κούροις ἔδρακε δάκρυ χέων

Aristophanes and Elpidius are the brothers of Aetius, in whose memory the monument is erected.

No. 149.—Khan Sakyatan Musli, four hours east from Konia. W.M.R., H.S.C., G.A.W.

ΑΙΛΙΟΚΡΑΤΕ
 ΡΟCBOYΛΕΥΤ
 ΗCΤΥΡΑΝΟΥ
 ΑΙΛΙΑΟΥΑΝΑ
 ΛΙCΖΩΝΤΕC
 ΜΝΗΜΗCΧΑ
 ΡΙΝΚΑΙΜΟCΧΩΥΙΩ

Αἴλιος Κράτε-
 ρος βουλευτ-
 ῆς Τυράν[ν]ου [κὲ
 Αἰλία Οὐάνα-
 λης ζῶντες
 μνήμης χά-
 ριν καὶ Μόσχῳ νύφ.

Ἐαυτοῖς is to be understood before καὶ Μόσχῳ.

Yaghli-Baiyat to Konia.

On making enquiries at Yaghli-Baiyat, we found that there was a shorter and more direct route to Konia than that by which we had come. By this shorter route Konia was distant between ten and twelve hours (say 36 to 40 miles). The general direction of the route was south-west until the hills were left; it then went almost due west across the plain to Konia. From Yaghli-Baiyat to the foot of the hills was about 8 miles, from thence to Konia nearly 30. To be more precise, the road went from the *yaila* in a westerly direction south of the hill on which the theatre stood. It ascended gradually for about ten minutes, crossed by a low pass the hills which surround Yaghli-Baiyat, and, descending rapidly for a short distance, turned almost south-west. Just before we reached the top of the pass we found that we were,

without doubt, following the line of an old Roman road, unmistakable traces of which were visible both there and at intervals for the next two hours and more. The direction south-west was maintained for an hour and a quarter, the Roman road running to the left of the track we followed, and being raised sometimes eight or ten feet above the level of the ground. We then reached the small cemetery at which we copied No. 148, the reading back from which to the top of the pass was $51\frac{1}{2}^{\circ}$. In thirty-five minutes more (two hours from Yaghli-Baiyat) we reached the top of a second pass, the descent from which to the plain occupied fifty minutes. From the foot of the second pass to the Geutcher Yaila was half-an-hour; thence to Khan Sakyatan Musli (No. 149) three hours, and to Konia seven.

Savatra.

Of late years the belief has been established that the site of Savatra was to be sought somewhere in the region between Lake Tatta and the Boz-Dagh.¹⁶ The language of Strabo, to which we shall have occasion to refer later, and to a less extent the indications of Ptolemy leave no doubt on this point; especially as they are consistent with what we can learn from Hierocles and the Notitia. Within this region Professor Sterrett fixed on Obruklu, to which the objection (cf. Ramsay, *Historical Geography*, p. 280) is that it draws its water from a lake and not from wells (cf. Strabo, xii., 568 and infra). Sarre (*Reise in Kleinasien*, p. 98), suggests Suverek (the resemblance in name is tempting), or Dewejuklu Keui. Professor Ramsay (*Historical Geography*, p. 343), who was followed by Mr. J. G. C. Anderson (*J.H.S.* xix. p. 280), was at one time in favour of Ak Ören, near Eski-il. The new site, however, which he suggests, fulfils all the conditions which are necessary for its identification with Savatra. It is in Lycaonia, and within the limits of the region fixed by general consent as alone likely to establish a claim to it. Its ruins, and especially the ruins of its public buildings, show that it was a place of considerable size. The imperial worship was represented by an ἀρχιερεύς (No. 144). It derives its water from wells, and it is on a Roman road. There is nothing in all these things inconsistent with what we know of Savatra, and it would be very difficult to find another place which would suit the site as well. We know that Savatra was an important place—coins of it are preserved from Trajan's reign onward, and in later times it was a bishopric; the evidence of the Peutinger table shows that it was on a Roman road; and Strabo signals it out as the typical city of a waterless land—ὕδατων σπάνις πολλή· ὅπου δὲ καὶ εὗρεῖν δυνατόν, βαθύτατα φρέατα τῶν πάντων, καθάπερ ἐν Σούτροις, ὅπου καὶ πιπράσκειται τὸ ὕδωρ (Strabo, *Geographica*, xii. 568). Recent investigations of Professor Ramsay, made in his journey of the last summer, show that a road ran from Laodiceia by Savatra and Hyde to Herakleia. The discovery of this road removed the one great difficulty which Professor Ramsay felt to the identifica-

¹⁶ See however, Smith's *Dict. of Greek and Roman Geography*, Soatra.

tion, the only road available previously being the one further north and joining Laodiceia and Archelais. Its position on this road made Savatra of importance in Byzantine as well as early times.

There are besides this only two difficulties in the way. The first is that, immediately following the quotation which I have just given from Strabo, the words occur as a description of Savatra, ἔστι δε κωμόπολις Γαρσαούρων πλησίον. For our purpose Γαρσαούρα may be regarded as identical with Archelais, and the distance from Ak Serai, the received site of Archelais, and Yaghli-Baiyat might be considered too great to justify these words. The difficulty, however, disappears when the context is examined. Garsaoura had been mentioned before, and was a convenient enough guide to the situation of Savatra, even if we are right, and although that city is as a matter of fact nearer to Iconium, the place next mentioned.¹⁷

The second difficulty is connected with one of the coins struck at Savatra and here reproduced.



It is given in the British Museum *Catalogue of Coins*, (Lycaonia xxi, 1900, p. 12 and Plate ii. 8), and Mr. Hill says of it that 'The type of No. 2 is certainly a water-deity of some kind, and if the country is waterless must represent a salt lake in the neighbourhood.' He suggests Tatta as the lake, and has drawn my attention to the fact that the figure is standing, not reclining as a river-god usually does. Although Lake Tatta is nearly forty miles distant from Yaghli-Baiyat, it is such a conspicuous feature of the district that the appearance

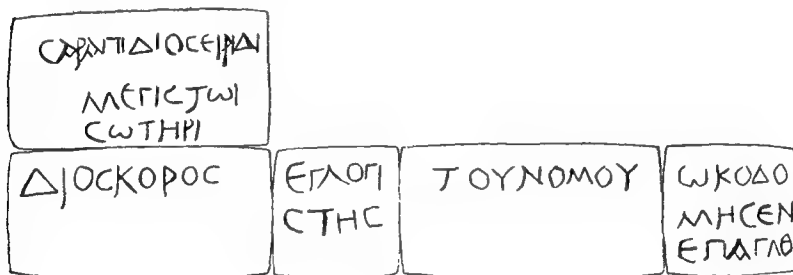
of its tutelary deity on the coins of Savatra would, in spite of the distance, present no difficulty, were we certain that the territory of Savatra reached as far as its shores. This Professor Ramsay thinks hardly possible, and suggests as an alternative the lake beside Obruklu (Purgos, cf. *Hist. Geography*, pp. 345, 346). Obruklu, he adds, must have been subject to Savatra, and coins mention only what is in the territory of the city.

H. S. CRONIN.

¹⁷ Note, especially, the vagueness of the ἐνταῦθά ποῦ and of the πλησιάζει δ' ἤδη ταύτοις τοῖς τόποις ὁ Ταῦρος.

A FOUNDATION-DEPOSIT INSCRIPTION FROM ABYDOS.

WHILE excavating on the temenos wall of the great temple of Sety I at Abydos in Upper Egypt, Mr. A. St. G. Caulfeild found the foundations of a stone pylon, a fragment of a great lintel, inscribed by Ptolemy IV, Philopator, and a small limestone block here figured.



Scale 1:3.

Σαράπιδι Ὀσείριδι Μεγίστῳ Σωτήρι
Δίοςκορος ἐγλογιστῆς τοῦ νομοῦ ᾠκοδόμησεν ἐπ' ἀγαθ(ῶι).

This block was probably a foundation-deposit ; the inscription is incised : the surface has been gilded. It seems probable that it refers to the building by Philopator. It is figured in 'The Temple of the Kings,' by Mr. Caulfeild, Pl. XX. ; and described on p. 19. On Sarapis and Osiris at Abydos, see *J.H.S.* xxi. p. 277.

W. M. FLINDERS PETRIE.

ARCHAEOLOGY IN GREECE 1901—1902.

THE repairs of the Parthenon are drawing to a close and visitors coming to Athens next Easter may hope to see the temple freed from its casing of timber. They must be prepared for other changes also. Already the removal of part of the scaffolding and the re-erection of it in July round the Erechtheum have shown that the Greek authorities intend to carry into effect the scheme for rebuilding the North Porch and West Wall which aroused some vigorous protests when it was publicly announced in April. The Parthenon repairs have been works of conservation. The present scheme is one of restoration, and it is natural therefore that it should have aroused a good deal of hostile criticism. The case for restoration is as follows:

(1) The ruinous condition of the Erechtheum is largely due to injuries received in recent times;

[A Caryatid of the South Porch and a column of the East Porch were removed by Lord Elgin in 1804. Three pillars and the roof of the North Porch, and the West Wall with two engaged columns, fell during the War of Independence.]

(2) Most of the fallen members, excepting those removed by Lord Elgin, are still on the spot and can be assigned with certainty to their original positions;

(3) The proposal to replace them involves no new principle, for important features of the Erechtheum as it stands are the result of a similar restoration;

[Three pillars of the North Porch were re-erected in 1838; it is now proposed to replace the roof which fell when they did. The South Wall was rebuilt in 1844, and the South Porch repaired in 1844 and 1846.]

A paper issued by the Minister of Education, Mr. Mompherratos, on April 4, (N.S. 17) of this year, specifies the works which have since been begun. The following is a free and somewhat condensed translation.

‘In view of the Report of the Committee of engineers and architects, Messrs. Saurot, Dörpfeld, Gazes, Kallias, Balanos, and Metaxas, and in accordance with the opinion of the Ephor-General of Antiquities, we resolve to proceed with the restoration of the North Porch of the Erechtheum. Use shall be made of the ancient material lying there, supplemented only so far as is absolutely necessary with new marble.

¹ I have to thank Mr. Kavvadias and Mr. Byzantinos for their courtesy in supplying me with copies of the Report on the Erechtheum by Mr. Balanos, dated October 1901, of the

Report of the Committee, dated March 26, 1902, and of the *ἀπόφασις ὑπουργικὴ* issued by Mr. Mompherratos and dated April 4, 1902. —R. C. B.

'(a) In the third column from the East two damaged drums, the third and fourth, shall be renewed in part.

'(b) In the column at the North-West angle the fifth drum shall be renewed in part, and the sixth which is missing shall be supplied; use shall be made of the new blocks lying beside the Erechtheum which were provided for this purpose on a former occasion.

'(c) In the column on the West side the missing part of the fourth drum shall be supplied by the insertion of a new piece and the injured parts of the fifth and sixth drums shall be renewed.

'(d) The marble beams of the roof shall be replaced in their original positions, supported by steel joists running their whole length which shall be masked with a marble facing three to four cm. thick, so that they shall not be visible.

'(e) The other architectural members shall be replaced in their original positions and shall be tied together with iron cramps and dowels. When a coffer of the ceiling is missing its place shall be filled with an ordinary unsculptured slab.

'(f) For the support of the central marble beam which abuts on the wall above the doorway and might by its weight cause injury to the broken lintel, a steel joist shall be inserted in the wall immediately under the roof-beams.

'(g) Further we resolve that the West Front of the Erechtheum shall be partially reconstructed in its original form and that the half-columns and their capitals which are preserved shall be erected in their original positions. New marble may be used when it is absolutely necessary in place of missing parts of the shafts.

'(h) The technical direction of the works is entrusted to Mr. N. Balanos the engineer attached to the Ministry of Education; he is to act in consultation with the Ephor-General of Antiquities, who shall have the supreme control of the works. The Minister reserves the right of summoning the Committee of engineers and architects in order to hear their views on questions that may arise during the progress of the works.'²

Of the members of the Committee responsible for this momentous decision Mr. Saurot is director of public works, Dr. Dörpfeld at once an archaeologist and an architect, Mr. Metaxas an architect, Mr. Balanos the skilful architect and engineer who has superintended the repairs of the Parthenon, while Mr. Gazes and Mr. Kallias are civil engineers. It is a local committee of technical experts, familiar with marble architecture both ancient and modern, and well qualified to advise on the methods and materials to be adopted and on difficulties which may present themselves during the restoration. But the experiment of restoration would be watched with less anxiety if the question whether or no it should be undertaken had been submitted to a Committee more international in character and more varied in composition. However, the discretion exhibited in the repairs of the Parthenon affords good ground for expecting that the restoration of the North Porch and West Wall of the Erechtheum will be justified by the result. What many lovers of the Acropolis fear is that the successful execution of these works may lead to a far more difficult and dangerous experiment, that of re-erecting the columns of the Parthenon. They have come to believe that these monuments, the

² A criticism of these proposals by Mr. R. W. Schultz, in the *Athenaeum* of June 28, contains two important recommendations, that the metal supports should be entirely encased

in concrete and made to look exactly what they are—modern expedients; and that the ties or cramps used should be not of iron but of bronze or gun-metal.

heritage which Greece has received from the past, belong not only to Greece but to the whole civilised world. But those who claim a voice in the administration of this trust should remember that Greece, one of the poorest countries in Europe, has for generations borne the whole cost of maintaining her ancient monuments and has maintained them worthily, and that a foreigner may visit the sites and museums of Athens and the provinces without being called upon to pay a penny either by way of admission-fee or as a voluntary contribution to the cost of their maintenance.

The principle of restoration has been accepted at Athens ever since the reconstruction of the little temple of Nike. During the present summer Mr. Kavvadias has been simultaneously excavating and rebuilding the *cella* of the temple of Apollo at Bassae. Many of the blocks, dislodged by earthquakes, lie one on another in a grouping so near their original order that intelligent excavation has made it possible to replace them with absolute certainty course by course.

Another work of reconstruction, which has been on the programme of the Archaeological Society ever since it came into being, is likely to be undertaken soon, the reconstruction of the monumental Lion of Chaeronea. Mr. Skias has been deputed to make a preliminary excavation of the spot where it stood. Some years ago Mr. Cecil Smith as Director of the British School offered to undertake the re-erection of the Lion with funds which had been put at his disposal for the purpose. The offer was refused — a striking instance of the unbending patriotism with which Greeks insist that they, and they only, are responsible for the maintenance of their national monuments.

The wall of the Acropolis immediately north of the Erechtheum has been lowered so as to make the temple more visible from the streets below. In the course of some repairs to the wall further west there was found a fragment of the inscription *C.I.A.* i. 324, relating to the building of the Erechtheum in the year 407.

The diving operations off Antikythera brought little of interest to light in the later months of last year and have now been discontinued. After fruitless negotiations with Herr Sturm of Vienna, whose success in piecing together the bronze athlete from Ephesus I described in this record two years ago (*J.H.S.* xx. p. 179), the Greek Government has entrusted the task of repairing the Hermes of Antikythera to the French restorer, M. André. His experience has been mainly with smaller works of art, such as the treasure of silver plate from Bosco Reale, but he is an artist of extraordinary knowledge and versatility. He reached Athens with two assistants in the last days of August, and by this time the statue should be ready for exhibition.

Among the important events of the summer has been the presentation to the National Museum by Mr. Carapanos of his collection of antiquities including the valuable series of bronzes from his excavations at Dodona and of archaic terra-cottas from Corfu. The collection is to be kept together and will be accommodated in a hall hitherto occupied by sculpture of

secondary interest. Schemes for enlarging the National Museum and for erecting a new Epigraphic Museum, perhaps in the neighbourhood of the Dipylon, are still under consideration. Space has been made for a part of the important series of early vases found in the excavations of the British School at Phylakopi by clearing some cases in the Mycenae Hall. Where the remainder of the Melian collection is to be exhibited has not yet been decided.

Turning to the excavations of the past year, we find once more that the discoveries made in Crete, in the palaces and cities of what we are beginning to call, not the Mycenaean, but the Minoan period surpass all others in novelty and importance.

Dr. Arthur Evans has furnished the following summary of the results of his third season:—

At Knossos the work which began on the 15th of last February and was continued to July has been fertile in results beyond all anticipation. It seemed at first destined to be rather a campaign of finishing up and of rounding off a fairly ascertained area. But, besides the chambers that remained to be explored immediately contiguous to the Hall of the Double Axes and that of the Colonnades, excavated last year, the whole building was found to have a considerably larger extension on the Eastern side than had been expected. The building was thus seen to have climbed down the slope in descending terraces to a point some 80 metres East of the Northern entrance.

Considerable remains were uncovered of the Eastern boundary wall, or rather of four separate walls in immediate contiguity with each other. The 'Hall of the Double Axes' excavated last year was found to have a double portico at its further end facing both South and East. In the South Wall of this Megaron there had been visible last year a doorway leading to a finely paved passage with a "dog's leg" turn so constructed as to insure the privacy of the chamber beyond. The chamber thus approached has proved to be of quite original construction. It is flanked on two sides by a stylobate, also serving as a bench, between the pillars of which light was obtained, on the one side from a portico with two column bases, on the other from an area the further wall of which stepped back so as to insure the better lighting of the chamber within. On the West side of this room is a balustrade with an opening giving access to a small bath chamber. Above the gypsum lining slab of this bath-room a fine painted frieze of spirals and rosettes was found still clinging to the wall. Remains of a painted terra-cotta bath were found near.

Another interesting feature of the new Megaron itself was a small private staircase in its North Wall, leading up to the thalamoi or bedrooms above. Of the wall-paintings that had originally adorned the Megaron and its columnar fore-hall some important remains were discovered—including quite an aquarium of fish, with parts of two dolphins. This discovery sup-

plies the counterpart to the fine fish fresco brought to light by the British School at Phylakopê, and the latter work must be now definitely recognised as a product of the Knossian School. One very characteristic feature is common to both works. As the different tones of blue had to be mainly reserved for the fish themselves, and in order to give them greater relief the ground was left white, and the sea water gracefully indicated by azure wreaths and coils of dotted spray.

‘Here too was also found the upper part of a lady in a yellow jacket and light diaphanous chemise, whose flying tresses suggest violent action. It had possibly belonged to a scene from the bull-ring. Another fragment found here shows a smaller female figure nearly naked, springing from above and seizing the horn of a galloping bull like the Tiryns figure. It has moreover been possible to put together a large part of a painted panel found in 1901, giving a highly sensational scene from a Minôan circus-show. A Mycenaean cow-boy is seen turning a somersault over the back of a charging bull, to whose horns in front clings a girl in boy’s costume, while another female toreador behind in similar dishabille stands with outstretched arms as if prepared to catch her as she is tossed over the monster’s back. The whole is a *tour de force* of the Minôan arena. Among other fresco remains were naturalistic foliage and lilies, and in a gallery East of the Hall of the Double Axes, fine veined imitations of marble slabs. A very suggestive piece of wall-painting also found on this side consists of a succession of mazes, more elaborate than those on the later coins of Knossos, and showing that the prototype of the Labyrinth in art goes back here to prehistoric times.

‘Throughout all the region of the great South Eastern halls, it has been possible to support a large part of the upper storey, and a most elaborate system of drainage has been found, including latrines with flush pipes and drains of advanced construction, together with a succession of stone shafts descending from the upper floors to a network of stone conduits beneath the pavement of the lower rooms, large enough for a man to make his way along them. Removal of some later constructions has greatly modified the Northern entrance passage, which now, with its massive Western bastion, has a very stately appearance. Outside this have been brought out the remains of a considerable portico, including the bases of a series of large piers.

‘Large fresh deposits of inscribed tablets have come to light, the general purport of which was shown by the appearance of certain ideographic signs, such as swords and granaries, and those indicative of persons of both sexes. The largest deposit referred to percentages—some with the throne and sceptre sign before the amount—apparently recording the King’s portion. A piece of a Mycenaean painted vase with linear characters and two cups, with inscriptions written within them in a kind of ink, supply wholly new classes of written documents. Great numbers of clay seal impressions were also brought out, including a fragment of one stamped by a late Babylonian cylinder. In magazines below the later Palace level, and belonging therefore to an earlier building, occurred seal impressions with pictographic signs, a striking evidence

of the anteriority of this system of writing on the Palace site of Knossos. Interesting new materials have also accumulated bearing on the metric systems employed and even it would seem on the origin of coinage.

‘Among the finds of smaller objects two stand out respectively as of first-rate importance in the history of architecture and sculpture. One of these was the discovery of parts of a large mosaic consisting of porcelain plaques,—a series of which represent the fronts of houses of two or three storeys. Fragmentary as most of these were it was possible to reconstitute a fair number with absolute certainty, and thus to recover an almost perfect picture of a street of Minôan Knossos in the middle of the second Millennium before our Era. The different parts of the construction, masonry, wood-work and plaster, are clearly reproduced, and the houses, some of them semi-detached, with windows of four and six panes—oiled parchment being possibly used for glass—are astonishingly modern in their appearance. Other plaques found with them show warriors, and various animals, a tree, a vine, and flowing water, so that the whole seems to have been part of a large design analogous to that of Achilles’s shield. The other find, made towards the close of the excavation, which throws a new light on the “Art of Dædalos,” is the discovery of remains of ivory figurines. These are carved in the round, the limbs being jointed together, and seem to have represented youths in the act of springing, like the cow-boys of the frescoes. The life and balance of the whole, the modelling of the limbs and the exquisite rendering of details, such as the muscles and even the veins, raise these ivory statuettes beyond the level of any known sculpture of the kind of the period to which they belong. The hair was curiously indicated by means of spiral bronze wires, and the amount of gold foil found with them suggests that they had been originally, in part at least, coated with gold—in which case they would have been early examples of the chryselephantine process. Some beautiful examples of goldsmith’s work were also found, a small gold duck with filigree work, a miniature gold-fish, exquisitely chased, and a spray resembling fern leaves.

‘The new materials bearing on the local religion are extraordinarily rich. Remains of a miniature temple of painted terra-cotta with doves perched above the capitals of columns occurred in a stratum belonging to the pre-Mycenaean building. In the later Palace a series of finds illustrated the “baetylic” cult of the Double Axe and its associated divinities. A gem shows a female figure,—apparently a Goddess,—bearing this sacred emblem. But more important still was the discovery of an actual shrine belonging to the latest Mycenaean period of the Palace with the tripod and other vessels of offering still in position before a base upon which rested the actual cult objects, including a small double axe of steatite, sacral horns of stucco with sockets between them for the wooden shafts of other axes, terra-cotta figures—cylindrical below—of a Goddess, in one case with a dove perched on her head; and of a male votary offering a dove. The actual discovery within the Palace walls of a shrine of the Double Axe must be regarded as a striking corroboration of the view already put forward in this *Journal* as to the

identification of the building with the traditional Labyrinth, and of the philological connexion of the latter with the *labrys* or double axe arrived at independently by Max Mayer and Kretschmer on philological grounds.

'One very important result of this year's excavations has been the discovery of a whole system of chambers and magazines below the level of the later building showing, as is also proved by the abundance of re-used blocks with more primitive signs, that an earlier Palace had existed on the site. The magazines belonging to this earlier building were full of the remains of painted pottery belonging to the purer "Kamares" class, and of finer fabric than the more transitional and later off-shoots of the class found in some magazines brought to light this year in the S.E. quarter of the Second Palace. Some of the earlier painted vases found in the magazines of this lower building are of an egg-shell-like fineness of fabric, an elegance of shape and delicacy of colouring that was never certainly surpassed in the whole history of ceramic manufacture. Many are embossed in evident imitation of metal-work. We have here the proof of a highly developed "Minôan" culture going back at least to the middle of the third Millennium B.C. Fragments of obsidian vases found in this First Palace are of the Liparite type, unknown in the Aegean, and must have been derived from the Italian island.

'Below the "First Palace" structure again the remains of the extensive Neolithic settlement that underlies the whole site everywhere came to light. A considerable harvest of stone implements, primitive pottery, and "idols" of clay, marble, and shell was obtained from this Neolithic deposit.

'Owing to the constant need for propping up the upper storeys, and for supporting terraces, much of the work has been of a difficult and at times dangerous nature, entailing a vast amount of actual construction in wood, stone, and brick. The Shrine, like the Throne Room, had to be roofed over. Vast masses of earth had also to be removed from parts of the site and nearly 250 workmen, including over a score of masons and carpenters, were constantly employed. Throughout the whole the explorer had the devoted assistance of Dr. Mackenzie in superintending the excavation, and of Mr. Fyfe on the architectural and engineering side.

'The excavation of the S.E. corner of the Palace has still to be completed, and some works of delimitation must be carried out in other directions. The search for tombs must certainly be renewed and the lower Palace strata have also still to be explored at several points, and more "Kaselles" opened. Continued researches into the Neolithic deposit are also desirable, as well as the examination of some neighbouring buildings. Unfortunately the total amount that the Cretan Exploration Fund—including the British Association Grant—was able to contribute towards the year's expenses has again fallen far short of what it was necessary to expend.'

During April and May the British School undertook preliminary excavations at PALAIOKASTRO. Mr. Bosanquet was accompanied by the architect of the School, Mr. Heaton Comyn. The plain of Palaiokastro, the

largest plain on the East Coast of Crete, measures three miles from East to West and two from North to South. Almost uninhabited at the beginning of last century, it has gradually been brought under cultivation, and its olive groves are now the best in the province. There was no important settlement here in Greek or Roman days; the only visible remains of the classical period are some foundations on the little harbour, probably those of a warehouse from which the oil and other produce of the district were shipped. A Venetian writer describes the place as uninhabited in the seventeenth century and explains that it was the resort of corsairs. The Cretan seas have been the haunt of pirates throughout history, and the islands clustered round the North-East corner of Crete afforded them an especially convenient shelter. Whatever the reason, there seems to have been no large settlement at Palaiokastro from Mycenaean times until the middle of the nineteenth century. But in Mycenaean times it was one of the principal centres, perhaps the capital, of Eastern Crete. The excavations were rewarded by the discovery of a Mycenaean town extending over an area of at least 500 by 300 yards, and of cemeteries which throw new light on the burial customs of the earliest inhabitants.

The most conspicuous feature of the plain is a steep table-topped headland called Kastri, which juts out into the sea midway along the low, and in parts marshy, beach. In spite of its acropolis-like form it does not seem to have been fortified. The scanty remains on its summit are those of a very late Mycenaean village. Beneath them we found a few fragments of much earlier pottery, including some Kamárais ware. At the foot of Kastri, and sheltered by it from the north, lies a sandy crescent-shaped bay, the natural harbour of the plain. A smaller promontory forms the southern horn of the crescent, and from this point southward and westward lie the extensive ruins of the Mycenaean town. A building on the southern promontory, constructed of enormous limestone blocks, may be the 'Palaiokastro' which gave its name to the place. The principal ruin-field is called Roussolákkos, *the red hollow*, on account of the red earth formed by the disintegration of the Mycenaean brickwork. It is cut in two by a ridge running north and south on which are the earliest cemeteries. The houses near the sea are built on the gravel cliff and are humbler in character and apparently older than those lying inland. One of them yielded evidence of a primary and secondary occupation, fine pottery of the Knossian Palace style being found beneath the higher floor level. Another contained whole vases of the Kamárais style, but nothing Mycenaean in the strict sense.

The largest of the houses which were examined lies inland, in a group of what appear to be spacious upper-class houses; they are constructed partly in the 'megalithic' style, characteristic of the Mycenaean homesteads so common in the limestone districts of Crete, partly in regular ashlar masonry; the upper storey, where one existed, was of brick. The plan of this house is perfectly intelligible, and in some respects anticipates that of the Greek house of classical times. The entrance is from a large courtyard into an L-shaped *megaron* twenty-five feet long, the roof of which was supported on four

columns placed round a cemented *impluvium*, six feet square. The megaron can have had no windows and derived its light almost entirely from this hypaethral opening. Four doorways give access from the megaron into other living-rooms, one of them containing a sunken bathroom, a reproduction in miniature of those found in the palaces at Knossos and Phaestos. In all thirty-six rooms were excavated here, of which twenty-two lie within the megalithic walls of the original mansion, and the remainder round a second courtyard. The house was originally one-storeyed. Later an upper storey was added in brick, with two staircases leading to it, one of them over six feet wide. This principal staircase ascended to a richly decorated megaron; the rooms below it were full of fallen masses of fresco, and of wall-revetments of polished schist; and in one of them there was found a large column base, fallen from the upper floor and lying in the earth some feet above a smaller column-base *in situ* in the ground floor. At the time of the construction of the upper storey some of the ground-floor rooms were converted into magazines. One of them has a plaster floor painted in colours, and a stone bench against the end-wall. This and an adjoining chamber yielded over 500 vases. Among the smaller 'finds' are a well-preserved tablet inscribed with characters in a linear script nearly related to that of Knossos, a pair of 'sacred horns' in stucco, and jars containing wheat and two kinds of peas.

Still more important results were obtained in the Cemeteries. Hitherto we were very imperfectly informed as to the method of sepulture practised by the Cretans of the Kamárais period: and graves containing Kamárais pottery were practically unknown. Of the beehive tomb, the typical tomb of Mycenaean times on the mainland, only one example was discovered. It is cut in the clay subsoil and approached by a passage twenty-five feet long. It yielded six late Mycenaean vases and three bronze implements, a dagger, a knife and a razor. As a rule the Mycenaean inhabitants seem to have laid their dead in small family burial-places near their homesteads. Groups of two or more earthenware *larnakes*, shaped like bath-tubs or coffers with gable-lids, occur in many parts of the plain. These had contained not complete corpses, but bones which were removed from the earth when time sufficient to decompose the body had elapsed after the original interment. A similar custom still prevails in the island. A still older form of this practice was illustrated by a very remarkable enclosure discovered on the ridge which cuts the town-site in two. It is a rectangle measuring twenty-seven feet by thirty-two feet, enclosed by a wall of rude limestone blocks, and subdivided by four similar walls into five parallel compartments, within which were packed in seeming confusion skulls, bones, and vases, principally cups of various patterns. The date of the deposit is given by the vases, many of which are good examples of Kamárais ware, with a brilliant decoration of white and red on a black ground, and by a three-sided seal bearing pictographic characters. There was also an unique series of miniature vessels carved out of marble, steatite, and alabaster, and of earthenware vessels painted in imitation of them. The bones were in heaps or bundles, not laid

in their natural order. The skulls had been transported from their previous resting place with some care, but for the other bones there was no rule; in some cases the heap beneath the skull seemed to represent a complete individual, in others the minor bones were almost wholly wanting. Sometimes the principal bones were formed into a kind of bed on which two or three skulls were laid.

A second and apparently similar bone-enclosure has been discovered and will be excavated next spring, with the help, it is hoped, of a physical anthropologist, towards whose expenses a grant of £50 has been made by the British Association.

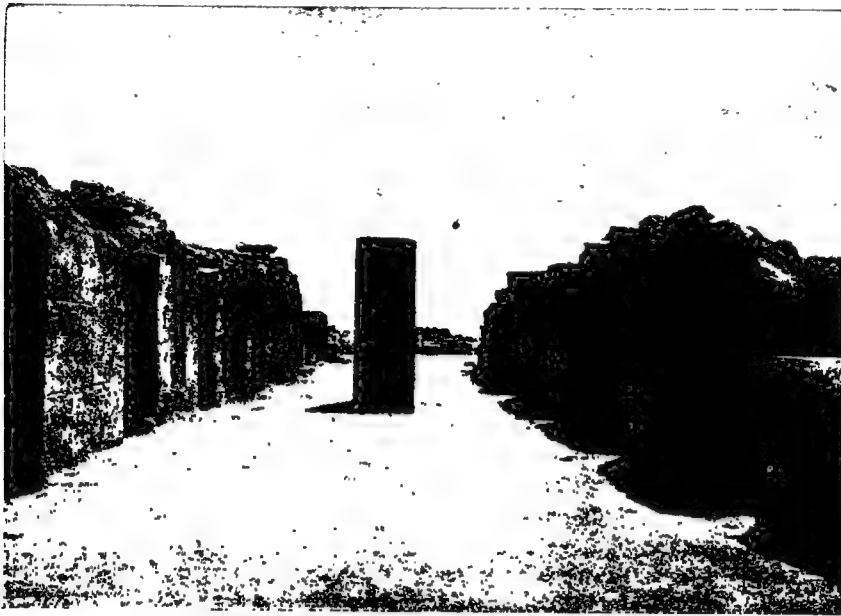


FIG. 1.—PHAESTOS. CORRIDOR WITH STORE-ROOMS ON EITHER SIDE.

At PHAESTOS Professor Halbherr and Mr. Pernier have finished the excavation of the Palace. By their kindness I am permitted to publish here two photographs which give an excellent idea of the corridor with store-rooms opening from it on either side (Fig. 1), and of the great stairway, forty-five feet wide, which leads up from the west terrace to the principal Megaron (Fig. 2), described in the last volume of this *Journal* (vol. xxi. p. 337).

During the past season the excavation has been continued northwards, where the women's quarters are thought to have been. Here are a vestibule with eight entrances and a portico with two columns, more elaborately decorated than the rooms hitherto discovered. The wall-paintings represent foliage and flowers, among which the vivid colouring of the oleander, most characteristic of Cretan shrubs, is easily distinguished. Bath-rooms have

been discovered here as well as in the quarters of the men: the walls are decorated with *gesso duro* and alabaster. Unexpected results were obtained by trial-pits sunk through the floor of the megaron, which revealed a series of store-galleries filled with *pithoi* and smaller crockery, evidently the basement-rooms of a palace of the Kamárais period which had been destroyed by fire. When the palace was rebuilt these rooms, choked with fallen masonry to a depth of six or seven feet, were used as a substructure. The interval cannot have been a long one, for there are indications that the rebuilding took place in the Kamárais or early Minoan and not in the Mycenaean period.



FIG. 2.—PHAESTOS. STAIRWAY TO THE MEGARON.

Having finished the excavation of the palace, the members of the Italian Mission, reinforced by Mr. Gerola who had been occupied previously with the search for tombs, and by Mr. Savignoni, turned their attention to a site known as Hagian Triada where they had noticed surface-indications of Mycenaean remains. Phaestos, it will be remembered, stands on the eastern-most of a chain of heights which break the monotonous level of the great Messarà plain and deflect to the north the slow waters of the Geropotamos some five miles from their outlet into the sea. At the other end of the ridge, two miles to the north-west, is a rounded eminence which takes its name from a Venetian chapel of the Holy Trinity, 'Αγία Τριάδα. Here the lords of Phaestos seem to have had a summer residence—possibly a sea-side villa, for river and sea must have met near the foot of the hill at an

earlier stage in the formation of the delta. Trial-pits have revealed ashlar walls (and in one of them a window), a stair and a portico, and rooms which seem to have been undisturbed since the day when the occupants fled. Two of the tall-stemmed stone lamps, so characteristic of Minoan interiors, were found standing to right and left of a doorway. There is reason to hope that the minor antiquities and works of art, which were almost wholly lacking in the adjoining palace, may be found here in abundance. Already we hear of frescoes and alabaster friezes: one wall-painting represents a cat stalking a bird, described as a silver pheasant; another shows a hare running across a meadow, woods and rocks being represented in naturalistic fashion. A vase of carved steatite furnishes an equally life-like representation of the human inhabitants. Like many steatite vases it was made in several pieces, ingeniously fitted together; the two surviving pieces formed the upper half of the body and the neck. Round it runs a low relief representing a joyous procession of peasants, dancing and singing, carrying three-pronged forks on their shoulders. The leader is a conspicuous figure with long hair, in a cuirass of scale armour; the remainder, a score or more in number, wear only the characteristic loin-cloth with a tight belt and a small cap. Midway in the procession is a man beating time with a sistrum for three fellows who march behind him with mouths open as if singing lustily. The group which brings up the rear is carrying a man shoulder-high. The discoverers explain the scene as the return from a successful foray, and the man carried aloft as a prisoner. One is rather tempted, in view of the light equipment of the party, to regard it as a 'harvest-home,' and to see in the tridents which they carry the *θρίβακες* or winnowing-forks which are still called *θιρνάκια* in Crete.

Dr. Dorpfeld has continued his search for the Palace of Odysseus in the island of LEUKAS. With the aid of Dr. van Hille, a young Dutch scholar, he has sunk a series of trial-pits along the northern edge of the plain where he supposes the home of Odysseus to have been, and has discovered a considerable prehistoric settlement. They have also located an ancient conduit, formed of curious conical earthenware pipes, leading down into the plain from the hills on the west. If the theory be right, this may point to the *τυκτὴ πηγὴ* mentioned in the Odyssey. Some of these tapering pipe-sections, with a projecting collar for the joint, are very like those found at Knossos and may therefore be of early date.

Dr. Schrader, the new Second Secretary of the German Institute, has been studying the remains of the pediment-sculptures of the Hecatompedon, the sixth-century temple of Athena on the Acropolis. He assumes as the central figure of one gable a seated goddess, probably Athena herself, seen *en face* between two seated gods, Zeus and another, seen in profile, the angles being filled by two snakes. In the other pediment he places the group of Heracles in combat with Triton and the well-known snaky monster with triple human head and body, the so-called Typhon of the Acropolis Museum. The cornice-blocks above this pediment were decorated with

figures of waterfowl carved in low relief and coloured, those above the 'Zeus and Athena' pediment with figures of eagles.

At CORINTH Professor Richardson and two members of the American School, Mr. B. Hill and Mr. S. Bassett, were at work from the beginning of March until June 14. Once more enormous masses of earth have been removed, bringing to light a fresh region of the Romanised city at a disheartening depth and at a proportionate expense. The most important of the newly discovered buildings is a late Hellenic *στοὰ* which has been traced and in great part cleared for a length of 350 feet along the South side of the Temple-hill, and is believed to extend still further to the West. Its back served as a retaining wall to the temple-terrace. Its front, facing South, was of the Doric order. Along the axis of the portico ran an interior line of Ionic columns with an intercolumniation twice as great as that of the front—a common arrangement. Capitals, architrave-blocks and painted cornices have been found and furnish all the *data* required for a restoration on paper.

It was standing in Roman times, for the *finé* hard stucco of the architectural members has been overlaid with a thick coat of coarser Roman stucco; but its front was then hidden by a row of vaulted shops built only three feet from it and opening into a new south stoa further forward. Their front walls rest on the foundations of a large Hellenic building terminating in an apse, perhaps a *βουλευτήριον*. A similar street of shops at right angles to that just described was discovered in 1898 to the East of the Temple-hill, and proved to be the continuation within the city of the main road from the port of Lechaion. The whole series has now been cleared, eighteen chambers in all, and the excavation pushed back up the slope of the hill, where there had been an open piazza, bounded on the East by the shops and on the West by a very late, perhaps Byzantine, portico. Under the piazza, which had been artificially levelled up, are the remains of a Greek stoa of larger dimensions than that already described as bordering the south side of the hill, decidedly older and probably dating from the fifth century. Several water-conduits have been discovered. The largest, which has been traced for over a hundred yards, is generally large enough for a man to stand upright in, and seems to be contemporary with the South Stoa, the line of which it follows exactly. In it were found large quantities of lamps, ranging over all possible periods; it is fortunate that Mr. Bassett, one of the excavators, has for some time devoted himself to a study of the forms, ornaments and descriptions of ancient lamps.

Generally speaking, this season has been more productive of small antiquities than any of the six preceding it. In an article in the *New York Nation* of July 31, Professor Richardson mentions 'old Corinthian and Proto-Corinthian pottery in abundance, measured by bushels; terra-cotta figurines, some of them extremely archaic and at the same time finely wrought, and several old Greek inscriptions, one of them as old as the sixth century and in the local Corinthian alphabet.' In 1903 he proposes to clear the stage buildings of the theatre, the position of which to the North-West of the

Temple was determined as long ago as 1896. This spring he cut a trial trench across the orchestra and stage buildings. The fact that this trench was eight metres or over twenty-six feet deep, narrowing, owing to the looseness of the accumulated soil, from six metres at the top to two at the bottom, conveys some notion of the difficulties to be encountered. As was to be expected it revealed only a complex of walls of different dates and a quantity of marble fragments; among them there was one real prize, the head of a young man in Parian marble.

A modest Museum has been built at Old Corinth, at a cost of over 5000 *drachmai*, to house the sculpture and inscriptions, and it is to be hoped that local enterprise may soon provide simple quarters for travellers wishing to pay more than a flying visit to this impressive site. To its old attractions, the view North across the blue gulf or South to Acrocorinthus, the labours of the American School have now added a foreground of ruins which, arid and repellent though they seem, yet enable us to picture Corinth as she was, the city of commerce and of pleasure, of big shops and stately porticoes and cool running fountains.

A useful popular account of the excavations, with a plan of the site, was published by Dr. A. S. Cooley in *Records of the Past* for February and March of this year.

At DELPHI M. Homolle has undertaken no further excavations. The efforts of the French School have been concentrated on reducing to order the excavations already carried out and particularly on the installation of the new Museum, which has been formally opened. At Delos M. Dürrbach, a former member of the School, has been engaged since June in clearing away the unsightly mounds of excavated earth which have long defaced the sacred enclosure. When these 'spoil-heaps' have been removed, the foundations of the temples, porticoes and treasuries ought to tell their story as plainly as those in the Altis at Olympia.

Mr. Vollgraff, of the French School, has kindly permitted us to publish some notes descriptive of his successful first season at ARGOS. He excavated there from May to September. The work was begun with an exploration of the hill, called 'Ἀσπίς' by the ancient and Prophet Elias by the modern inhabitants, which lies to the north of the present town. Its ancient name of 'The Shield' is justified by its shape; it is a low rounded hill, some four hundred feet high and two miles in circumference. At the top, where there is a little church of the Prophet Elias, Mr. Vollgraff came upon the foundations of a dwelling-house—possibly, he thinks, the abode of a chief—of the prehistoric period. The pottery and the construction of the walls are said to present analogies to those found in the lowest strata at Troy and at Tiryns. On a lower terrace girdling the summit are remains of several mansions one above the other, belonging to a period a little more recent, but yet anterior to the Mycenaean period. The lower terrace was surrounded by a strong cyclopean wall about 500 metres in length. Side by side with the foundations of the

cyclopean wall and outside them, run those of a polygonal wall which may date from the seventh century. The Greek wall had four square towers and one round one; it did not surround the top of the *Aspis* entirely but only defended that part of the hill which does not face the town, the remainder being enclosed between the city walls, the traces of which have been discovered on the slopes of the *Aspis*. On the west the city wall descends towards a place now called *Portitices*, where the site of one of the gates of the ancient city has been determined, and then rises again towards the summit of the *Larissa*, stopping short at the rocky height crowned by the picturesque ruins of the Venetian Castle. On the east the wall is more difficult to follow, and it seems impossible to discover the line of the city-wall in the plain. But various indications warrant the statement that the modern town does not coincide with the ancient, which extended further to the south. On the southern shoulder of the *Aspis*, Mr. Vollgraff has cleared a remarkably well-preserved reservoir, intended to hold rain-water collected from the roofs of the buildings higher up the hill. It consists of two parts, a circular cistern which served apparently as a settling-tank, its only outlet being at a considerable height, and a long reservoir beside it. Both are lined with fine hard cement. The reservoir is a rock-cut tunnel, forming in section a pointed arch and resembling the built galleries at Tiryns, with the difference that its walls are nowhere perpendicular but curve inwards from the floor-level. The only openings for drawing water are at the two ends. It is almost certainly a work of the Mycenaean age. Finally, in the valley named *Diradha*, which separates the *Aspis* from the *Larissa*, Mr. Vollgraff has discovered a Mycenaean cemetery with a number of tholos-tombs; all had been plundered at some distant period, but they still contained a number of Mycenaean vases of the close of the third style. One tomb had been re-used in the geometric period. The continuation of the excavations is assured by a generous donation from Mr. A. E. H. Goekoop, a compatriot of the excavator.

In the course of preliminary excavations undertaken in the island of *TENOS* M. H. Demoulin, foreign member of the French School of Athens, has succeeded in determining the site of the sanctuary of Poseidon and Amphitrite. He has cleared the walls of a portico, an *exedra* and the steps of a large building which appears to be the temple. This at any rate is the conclusion indicated by the inscriptions and fragments of sculpture discovered at this spot.

At *THERA* Baron Hiller von Gärtringen brought his excavations to a close by three weeks of work in the month of June. Dr. Pfuhl has been so kind as to furnish the very important notes that follow.

Within the area of the city itself the ground was cleared in several places and various gaps filled up. An interesting torso of Apollo in the archaic Parian style was found in the wall of a cistern by the Gymnasium of the Ephebi. The 'bag' of inscriptions is over a hundred, including many of the archaic period and some valuable Ptolemaic records. A trial excava-

tion by the chapel of Ζωοδόχος Πηγή was unsuccessful but the ground about Ἅγιος Στέφανος was completely excavated, revealing a Byzantine and a late classical settlement. An inscription belonging to the Byzantine building names the Ἀρχάγγελος.

On the south-west slope of Mesavouno (cf. *J.H.S.* xx. p. 177) Dr. Pfuhl excavated a cemetery differing essentially from that excavated by Dr. Dragendorf on Sellada; the two are contemporaneous (eighth to sixth century) but the nature of the ground necessitated a different arrangement. Beneath the limestone rocks of the hill on which the city is situated the slate rises in great steps. Five of these have been fashioned into terraces, with a roadway in front of each, the difference of level between them being about four metres. In details this extraordinary cemetery exhibits all sorts of irregularities; in one part the graves are arranged in groups and singly between masses of rock fallen from the heights above. Built in most cases with quarried stones, the graves are of many different types. Dr. Pfuhl hopes to be able to show how the forms of chamber- and shaft-tomb, both round and square, developed from a simple lining or packing of the grave with stones for the protection of vases placed in it. There are many oval and round tholos-tombs and intermediate types such as a shaft-grave with two straight walls and one vaulted circular wall. The roof was formed by the overlapping of flat stones, but is always more or less ruined. The direct derivations of all these forms from those which Tsountas has discovered on the Cyclades, especially in Syra, is manifest. It is noteworthy that many primitive forms survived side by side with the developed forms: and that even inside the chamber-tombs the several urns are often sheltered by a packing of stones. The layer of ashes from the funeral offering is often found under and upon the urns. For later offerings special pits were used, hewn in the rock and surrounded with a wall. The bones show that oxen, swine, sheep, goats, and rabbits were in use as victims; the latter occur chiefly in poor graves (the wild rabbit is at the present day the chief meat diet of the peasants of Thera), while the ox is found only in the richest family graves which contain a large number of interments. Cremation was the rule in Thera in archaic times, with the single exception that children up to the age of five or six were sometimes interred unburned in large jars. Certain rectangular enclosures were identified as burning-grounds, some of them public, others attached to family tombs. The usual offerings were eating and drinking-vessels, the former sometimes containing the remains of a meal. Weapons (daggers, lances, sling-stones) and ornaments (necklaces and rings) were rare. A very fine gold ornament of orientalizing style, and in other cases brooches and pins, had been affixed to the border of a cloth used to wrap round the bones. The vases furnish new evidence for the late geometric and orientalizing style, and indicate that Thera in the archaic period maintained close relations not only with Crete but with Cyprus.

In THESSALY Dr. Tsountas has this summer continued his exploration of prehistoric villages in the plain north-west of Volo. At Sesklo, a site

resembling Dimini, besides stone celts he has discovered one of lead. On the same hill-top he has excavated a prehistoric *μέγαρον*, furnished, unlike the palaces of the Argolid, with an *opisthodomos*. It is satisfactory to learn that these Thessalian finds are to be deposited at Halmyros, a town which already possesses a vigorous society of local antiquaries, and to form the nucleus of a special Thessalian Museum.

R. C. BOSANQUET.

M. N. TOD.

NOTE.—Since this article was passed for press, we learn from Mr. Bosanquet that the *Hermes* of Antikythera has been successfully restored and is now exhibited, and that the work on the *Erechtheum* proceeds apace.

EDD.

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RULES

OF THE

Society for the Promotion of Hellenic Studies.

1. THE objects of this Society shall be as follows:—

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains, and with this view to invite travellers to communicate to the Society notes or sketches of archæological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archæological researches in countries which, at any time, have been the sites of Hellenic civilization.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be *ex officio* members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.

4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty.

5. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof, and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.

11. The Council shall prepare an Annual Report, to be submitted to the Annual Meeting of the Society.

12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13. Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read, the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed

and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President and Vice-Presidents shall be appointed for one year, after which they shall be eligible for re-election at the Annual Meeting.

17. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

18. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

19. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

20. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

21. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

22. Upon any vacancy in the Presidency, occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

23. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

24. The names of all candidates wishing to become Members of the Society shall be submitted to a Meeting of the Council, and at their next Meeting the Council shall proceed to the election of candidates so proposed: no such election to be valid unless the candidate receives the votes of the majority of those present

25. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year ; this annual subscription may be compounded for by a payment of £15 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1894, shall pay on election an entrance fee of one guinea.

26. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

27. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

28. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1 ; otherwise they will be held liable for the subscription for the current year.

29. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

30. The Council shall have power to nominate British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

31. Ladies shall be eligible as Ordinary Members of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members.

32. No change shall be made in the Rules of the Society unless at least a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.

RULES FOR THE USE OF THE LIBRARY

AT 22 ALBEMARLE STREET.

I. THAT the Library be administered by the Library Committee, which shall be composed of not less than four members, two of whom shall form a quorum.

II. That the custody and arrangement of the Library be in the hands of the Librarian and Assistant Librarian, subject to the control of the Committee, and in accordance with Regulations drawn up by the said Committee and approved by the Council.

III. That all books, periodicals, plans, photographs, &c., be received by the Librarian, Assistant Librarian or Secretary and reported to the Council at their next meeting.

IV. That every book or periodical sent to the Society be at once stamped with the Society's name.

V. That all the Society's books be entered in a Catalogue to be kept by the Librarian, and that in this Catalogue such books, &c., as are not to be lent out be specified.

VI. That, except on Christmas Day, Good Friday, and on Bank Holidays, the Library be accessible to Members on all week days from eleven A.M. to six P.M. (Saturdays, 11 A.M. to 2 P.M.), when either the Assistant Librarian, or in her absence some responsible person, shall be in attendance. Until further notice, however, the Library shall be closed for the vacation from July 20 to August 31 (inclusive).

VII. That the Society's books (with exceptions hereinafter to be specified) be lent to Members under the following conditions:—

- (1) That the number of volumes lent at any one time to each Member shall not exceed three.
- (2) That the time during which such book or books may be kept shall not exceed one month.
- (3) That no books be sent beyond the limits of the United Kingdom.

VIII. That the manner in which books are lent shall be as follows:—

- (1) That all requests for the loan of books be addressed to the Librarian.
- (2) That the Librarian shall record all such requests, and lend out the books in the order of application.
- (3) That in each case the name of the book and of the borrower be inscribed, with the date, in a special register to be kept by the Librarian.
- (4) Should a book not be returned within the period specified, the Librarian may reclaim it.

(5) All expenses of carriage to and fro shall be borne by the borrower.

(6) All books are due for return to the Library before the summer vacation.

IX. That no book falling under the following categories be lent out under any circumstances :—

(1) Unbound books.

(2) Detached plates, plans, photographs, and the like.

(3) Books considered too valuable for transmission.

(4) New books within one month of their coming into the Library.

X. That new books may be borrowed for one week only, if they have been more than one month and less than three months in the Library.

XI. That in the case of a book being kept beyond the stated time the borrower be liable to a fine of one shilling for each week after application has been made by the Librarian for its return, and if a book is lost the borrower be bound to replace it.

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SESSION 1902—1903.

General Meetings will be held in the Rooms of the Society of Antiquaries, Burlington House, London, W., for the reading of Papers and for Discussion, at 5 P.M. on the following days :—

1902.

Tuesday, November 4th.

1903.

Tuesday, February 24th.

Tuesday, May 5th.

Tuesday, June 30th (Annual).

The Council will meet at 4.30 p.m. on each of the above days.

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 The Johns Hopkins Library, *Baltimore*.
 The Enoch Pratt Library, *Baltimore*.
 The Royal Museum Library, *Berlin*.
 The Royal Library, *Berlin*.
 The Central Free Library, *Ratcliffe Place, Birmingham* (A. Capel Shaw, Esq.)
 The University of Birmingham, *Birmingham*.
 The Boston Athenæum, *Boston, U.S.A.*
 The Bowdoin College Library, *Brunswick, Maine, U.S.A.*
 The University Library, *Breslau*.
 The Brooklyn Institute of Arts and Sciences, *Brooklyn, U.S.A.*
 The Bryn Mawr College Library, *Bryn Mawr, Pa., U.S.A.*
 The Library of Clifton College, *Clifton, Bristol*.
 The Antiken Cabinet des Ungar. National Museum, *Budapest*.
 The University Library, *Berkeley, California*.
 † The University Library, *Cambridge*.
 The Library of Trinity College, *Cambridge*.
 The Library of St. John's College, *Cambridge*.
 The Library of King's College, *Cambridge*.
 The Fitzwilliam Archaeological Museum, *Cambridge*.
 The Girton College Library, *Cambridge*.
 The Harvard College Library, *Cambridge, Mass., U.S.A.*
 The University College of South Wales, *Cardiff*.
 The University of Chicago Press, *Chicago, Illinois*.
 The Lewis Institute, *Chicago, Illinois*.
 The University Library, *Christiania, Norway*
 The Library of Canterbury College, *Christchurch, N.Z.*
 The Public Library, *Cincinnati, U.S.A.*
 The University Library, *Cincinnati, U.S.A.*
 The University of *Colorado, U.S.A.*
 The University Library of State of Missouri, *Columbia, Missouri, U.S.A.*
 The University of Czernowitz, *Czernowitz, Austria-Hungary*.
 The Public Library, *Detroit*.
 The Royal Museum of Casts, *Dresden*.
 † The Library of Trinity College, *Dublin*.
 The National Library of Ireland, *Dublin*.
 The King's Inns Library, *Dublin*.
 The Royal Irish Academy, *Dublin*.
 The University College, *Dundee*.
 The Durham Cathedral Library, *Durham*
 † The Advocates' Library, *Edinburgh*.
 The Sellar and Goodhart Library, *University, Edinburgh*.
 The Royal Holloway College, *Egham, Surrey*.
 The Library of St. Mary's College, *Emmitsburg, Maryland, U.S.A.*
 The University Library, *Erlangen*.
 The University Library, *Freiburg im Baden, Germany* (Prof. Stempf).
 The Philologische Seminar, *Gießen*.
 The University Library, *Glasgow*.
 The University Library, *Gottingen*.
 The Royal University Library, *Greifswald*.
 The Universität Bibliothek, *Halle*.
 The Dartmouth College Library, *Hanover, U.S.A.*
 The School Library, *Harrow, N.W.*
 The University Library, *Heidelberg* (Dr. Zangmeister).
 The Hull Public Libraries, *Hull*.
 The State University of Iowa, *Iowa, U.S.A.*
 The Cornell University Library, *Ithaca, N.Y.*
 The University Library, *Jena*.
 The Royal and University Library, *Königsberg*.

- The University of Kansas, *Lawrence, U.S.A.*
 The Leeds Library, *Commercial Street, Leeds.*
 The Public Library, *Leeds.*
 The Bibliothèque Universitaire, 3, *Rue Jean Bart, Lille, Nord.*
 The Free Library, *Liverpool.*
 The Society of Antiquaries, *Burlington House, London, W.*
 †The British Museum, *London, W.C.*
 The Department of Greek and Roman Antiquities, *British Museum, London, W.C.*
 The Athenaeum Club, *Pall Mall, London, S.W.*
 The Burlington Fine Arts Club, *Savile Row, London, W.*
 The Chelsea Public Library, *Manresa Road, Chelsea, London, S.W.*
 The Library of St. Paul's School, *West Kensington, London, W.*
 The London Library, *St. James's Square, London, S.W.*
 The Reform Club, *Pall Mall, London, S.W.*
 The Royal Institution, *Albemarle Street, London, W.*
 The Royal Societies Club, 63, *St. James's Street, S.W.*
 The Library, *Westminster School, London, S.W.*
 The Oxford & Cambridge Club, *Pall Mall, c/o Messrs. Harrison & Sons, 59, Pall Mall, W.*
 The Foreign Architectural Book Society (T. H. Watson, Esq.), 9, *Nottingham Place, W.*
 The Sion College Library, *Victoria Embankment, London, E.C.*
 The City Library, *Lowell, Mass., U.S.A.*
 The Bibliothèque Universitaire, *Palais Saint Pierre, Lyons.*
 The Whitworth Institute, *Manchester.*
 The Chetham's Library, *Hunts Bank, Manchester.*
 The Grammar School, *Manchester.*
 The Owens College, *Manchester.*
 The Royal University Library, *Marburg.*
 The Public Library, *Melbourne, Victoria (c/o Messrs. Melville, Mullen & Co.).*
 The Library of the University of Milan, *Milan.*
 The Königliche Paulinische Bibliothek, *Münster, I.W.*
 The Royal Library, *Munich.*
 The Archæological Seminary, *Munich.*
 The Free Public Library, *Newark, New Jersey, U.S.A.*
 The Library of Yale College, *Newhaven.*
 The Free Public Library, *Jersey City, New Jersey, U.S.A.*
 The Public Library, *New York, U.S.A.*
 The New York State Library, *Albany, New York.*
 The Library of Columbia University, *New York.*
 The Hamilton College Library, *Clinton, New York.*
 The Metropolitan Museum of Art, *New York.*
 The Library of the College of the City of New York, *New York.*
 †The Bodleian Library, *Oxford.*
 The Junior Library, *Corpus Christi College, Oxford.*
 The Library of All Souls College, *Oxford.*
 The Library of Worcester College, *Oxford.*
 The Library of Christ Church, *Oxford.*
 The Library of Exeter College, *Oxford.*
 The Library of St. John's College, *Oxford.*
 The Library of New College, *Oxford.*
 The Library of Oriel College, *Oxford.*
 The Library of Queen's College, *Oxford.*
 The Library of Trinity College, *Oxford.*
 The Library of Lincoln College, *Oxford.*
 The Union Society, *Oxford.*
 The University Galleries, *Oxford.*
 The Lake Erie College, *Painesville, Ohio, U.S.A.*
 The Bibliothèque de l'Institut de France, *Paris.*
 The Bibliothèque de l'Université de France, *Paris.*
 The Bibliothèque des Musées Nationaux, *Paris.*
 The Bibliothèque Nationale de Paris, *Paris.*
 The École Normale Supérieure, *Paris.*
 The Library Company, *Philadelphia*
 The Library of the University of Pennsylvania, *Philadelphia, Pa., U.S.A.*
 The Carnegie Library, *Pittsburg, Pa., U.S.A.*
 The Vassar Library, *Poughkeepsie, N.Y.*
 The Archæological Seminary, *The University, Prague (Dr. Wilhelm Klein).*
 The University Library, *Prague.*
 The Bibliothèque de l'Université, *Rennes.*
 The American School of Classical Studies, 5, *Via Vincenza, Rome.*

The Mount Holyoke College, *South Hadley, Mass., U.S.A.*
 The Royal Library, *Stockholm.*
 The Archæological Museum, *The University, Strassburg* (per Prof. Michaelis).
 The Imperial University and National Library, *Strassburg.*
 The Free Library, *Sydney, New South Wales.*
 The University Library, *Syracuse, New York.*
 The University Library, *Toronto.*
 The Universitäts Bibliothek, *Tubingen.*
 The Library of the University of Illinois, *Urbana, Illinois.*
 The Library of Congress, *Washington, U.S.A.*
 The Boys Library, *Eton College, Windsor.*
 The Bibliothèque Publique, *Winterthur*, (Dr. Imhoof-Blumer).
 The Free Library, *Worcester, Mass., U.S.A.*
 The Williams College Library, *Williamstown, Mass., U.S.A.*
 The Kunstgeschichtliches Museum der Universität, *Würzburg.*

† Libraries claiming copies under the Copyright Act.

LIST OF JOURNALS, &c., RECEIVED IN EXCHANGE FOR THE JOURNAL OF HELLENIC STUDIES.

American Journal of Archæology (Miss Mary H. Buckingham, *Wellesley Hills, Mass., U.S.A.*).
 Analecta Bollandiana, Société des Bollandistes, 14, *Rue des Ursulines, Bruxelles.*
 Annual of the British School at *Athens.*
 Bulletin de Correspondance Hellénique (published by the French School at *Athens*).
 Bullettino della Commissione Archeologica Comunale di Roma (Prof. Gatti, Museo Capitolino, *Rome*).
 Ephemeris Archaeologike, *Athens.*
 Jahrbuch of German Imperial Archaeological Institute, Corneliusstrasse No. 2, II., *Berlin.*
 Jahreshfte des Österreichischen Archæologischen Institutes, Türkenstrasse, 4, *Vienna.*
 Journal of the Anthropological Institute, *Hanover Square.*
 Journal of the Royal Institute of British Architects, 9, *Conduit Street, W.*
 Journal International d'Archéologie Numismatique (M. J. N. Svoronos, Musée National, *Athens*).
 Mélanges d'Histoire et d'Archéologie, published by the French School at *Rome.*
 Mittheilungen of the German Imperial Archaeological Institute at *Athens.*
 Mittheilungen of the German Imperial Archaeological Institute at *Rome.*
 Mnemosyne (care of Mr. E. J. Brill), *Leiden, Holland.*
 Neue Jahrbücher (c/o Dr. J. Ilberg), *Rosenthalgasse 3, II., Leipzig.*
 Numismatic Chronicle, 22, *Albemarle Street.*
 Philologus. Zeitschrift für das klassische Altertum (care of Dietrich'sche Verlags Buchhandlung, *Göttingen*).
 Praktika of the Athenian Archaeological Society.
 Proceedings of the Hellenic Philological Syllogos, *Constantinople.*
 Publications of the Imperial Archaeological Commission, *St. Petersburg.*
 Revue Archéologique, *Paris* (per M. Georges Perrot, 45, *rue d'Ulm*).
 Revue des Études Grecques, Publication Trimestrielle de l'Association pour l'Encouragement des Études Grecques en France. *Paris.*
 Transactions of the Cambridge Philological Society and Journal of Philology.

SESSION 1901-1902.

The First General Meeting was held on November 7, Prof. P. Gardner, V.P., in the chair.

Mr. Cecil Smith gave a description of a large Proto-Attic amphora, of which drawings were exhibited. The fragments of this vase were found in the course of excavations by the British School at Athens on the site of the Gymnasium of Cynosarges, in circumstances which suggest that, like most of its class, it probably stood on the outside of a tomb in place of a stele (*J.H.S.* xxii. p. 29).—Mr. John F. Baker-Penoyre showed his illustrations for a forthcoming paper by Mr. J. H. Hopkinson, entitled 'An Early Island Vase Fabric,' and gave some particulars of Mr. Hopkinson's researches (*J.H.S.* xxii. p. 46).—In the discussion which followed the papers, the Chairman, Mr. Cecil Smith, Prof. Ernest Gardner, and Mrs. S. Arthur Strong took part.

The Second General Meeting was held on February 25, Mr. Talfourd Ely in the chair.

Mr. A. H. Smith read a paper, illustrated with the magic lantern, on 'Humour in Greek Art.' Examples were shown of the many varieties of humour that are met with in the different periods of Greek history. At the earliest period the modern spectator is for the most part laughing at rather than with the artist, though perhaps in some instances the artist himself intended a humorous effect, so far as his limited resources permitted. Later his attempts at humour take various forms. He may choose an obviously humorous subject for his theme, such as the story of Hermes and the cattle of Apollo, as told in the Homeric hymn to Hermes. Or he may make a humorous variation of a well-known subject. Thus the beautiful vase of Hieron, showing the goddesses going before Paris, represented the climax of a long artistic tradition. The artist who showed the same goddesses, each adjusting her toilet for the Judgment, treated his subject with a truly humorous touch. Later on we have scenes of mere Aristophanic buffoonery from the comic stage. Again, in another direction, scenes from the life of childhood and youth begin to appear in the fourth century, and continue till the Roman Empire.—In the discussion that followed Prof. E. A. Gardner and Mr. G. F. Hill spoke of the origin

of the 'archaic smile,' and Mrs. S. A. Strong laid stress on the diversity of the subjects exhibited.

The Third General Meeting was held on May 7, Sir R. Jebb, President, in the chair.

Mr. G. F. Hill showed lantern illustrations of some of the more remarkable Greek coins acquired by the British Museum during the past five years. A gold stater of Tarentum, of about 338 B.C., with the infant Taras appealing to his father Poseidon, is connected with the appeal made by Tarentum to Lacedaemon, in response to which Archidamus came to Italy. A unique silver stater of the Achaean League, in style resembling the fine Arcadian coins of about 360 B.C., proves the correctness of the old attribution to the Achaeans of Peloponnesus of other coins now generally classed under Achaea Phthiotis. The head popularly known as Odysseus on an electrum stater of Cyzicus was considered in connexion with the other types which suggest that it is rather one of the Cabiri. A small silver coin was attributed to the Carian city of Lydae, on the ground of its inscription and the resemblance of its types to those of Cnidus. A bronze coin of Claudius with a figure of the goddess of Myra in Lycia was shown to permit of the attribution to that province of a group of coins hitherto regarded as uncertain. A unique stater of Tarsus with a facing head of Heracles is, it is suggested, additional evidence of the influence exerted by Western Greece on the Cilician coinage of the early fourth century. In connexion with a tetradrachm bearing the types of Alexander IV., but the name of Ptolemy, Prof. Jan Six's view, that the portrait represents not Alexander the Great, but his son, was disputed, and the relation of the type of the fighting Athena to other types, such as the Athena Alcis of Macedonian and Seleucid coins, was considered.—The Chairman and Sir H. Howorth made some comments on the paper, which was very favourably received.

The Annual Meeting was held on July 1, Sir R. Jebb, President, in the chair.

In moving the adoption of the Council's Report the President referred to the satisfactory increase in the number of members, and alluded to the losses which the Society had sustained by death, including the names of the Bishop of Durham, Mr. C. J. Monk, and Mr. W. J. Stillman.

The following Report was read by the Acting Hon. Secretary (Mr. H. B. Walters) on behalf of the Council :—

The Council have again to report a satisfactory session, in which the work of the Society has been carried forward in its several departments with energy and effect. Three General Meetings have been held and have been well attended. And in regard to these meetings a new arrangement has been made which should materially increase their success in the future. It has for some time past been felt that for this purpose the rooms of the

Royal Asiatic Society were hardly adequate. The use of the lantern in recent years has tended to draw a larger number of members to the meetings, and the rooms in question have on several occasions been inconveniently crowded. Fortunately the Council has been able in the course of the past session to come to an arrangement with the Society of Antiquaries, whereby in future all General Meetings will be held in their excellent rooms in Burlington House. The small fee charged for this accommodation has been met by a corresponding reduction in the rent charged by the Royal Asiatic Society at Albemarle Street, so that the greatly improved accommodation for General Meetings has been secured without any additional outlay. The Council feel that cordial acknowledgments are due to the Council of the Society of Antiquaries for the very friendly spirit in which they received the overtures of the Hellenic Society in this matter, and that this co-operation between two Societies working in the same field should be of real advantage to the studies in which both alike are interested.

The Council have again made a grant, this time of £100, to the Cretan Exploration Fund. By the aid of this Fund Mr. Evans last year carried further his remarkable excavations on the site of Knossos, while Mr. Hogarth made some interesting discoveries at Kato Zakro. The two explorers described their results at some length in the recent issue of the *Annual of the British School at Athens*. The response to the Appeal issued by the Managers of this Fund last autumn was unfortunately so inadequate that it was found necessary to confine its operations during the present season to the work at Knossos upon which Mr. Evans has again been successfully engaged, though it is doubtful whether the funds now available will suffice for the completion of the excavations. Considering the unique importance of these Knossian discoveries to the history of ancient art and civilisation, as recognised by archaeologists in all parts of the world, it would indeed be a matter of profound regret if Mr. Evans were to be prevented by lack of means from carrying them to a satisfactory conclusion.

Meanwhile another very promising Mycenaean site, at Palaeokastro, near Sitia in Eastern Crete, which Mr. Hogarth had hoped to excavate under the auspices of the Cretan Exploration Fund, has been undertaken by the British School at Athens, and it is hoped that the Director, Mr. R. Carr-Bosanquet, may be able to present to members on this occasion a preliminary report of the results.

Some members will probably be aware that a British School has now been established at Rome on much the same lines as the School at Athens. Although the financial position of the new School is still far from secure, a competent Director has been found in Mr. G. McNeil Rushforth. Several good students have availed themselves of his guidance, and the nucleus of a library has been formed in excellent rooms secured for the School in the Palazzo Odescalchi. Seeing that Greek Art can be studied with advantage both at Rome and elsewhere in Italy, the Council have thought it right to respond to an appeal for support to this young and promising institution by

making a grant of £25 a year for a period of three years from January 1, 1903. The success of the School at Rome is a matter of real concern to this Society, and the Council cordially commend its needs also to the private benevolence of members.

Satisfactory progress has been made with the Facsimile of the Codex Venetus of Aristophanes which was announced in last year's Report. The Facsimile itself is practically complete. It had been hoped that Professor J. W. White of Harvard, on whose initiative, as President of the Archaeological Institute of America, the Facsimile was undertaken, would have contributed the Introduction. Unfortunately he found it necessary to abandon the task, and the work was then entrusted to that very competent scholar and palaeographer Mr. T. W. Allen, who paid a special visit to Venice in the course of the spring for the purpose of revising his notes on the MS. He is now well advanced with the work, and it is hoped that the Facsimile may be ready for issue in the course of the autumn. It is satisfactory to report that already about eighty of the two hundred copies have been subscribed for in Europe and in America.

Another special publication, which was announced last year, that of the Report on the very important excavations undertaken by the British School at Athens on the site of Phylakopi in the Island of Melos, has also made good progress, and it is hoped that the volume may appear before the end of the year. Members are reminded that, in order not to interfere with the publication of the Journal, it was decided to issue this volume at cost price to members and at a higher price to the general public. The Council trusts that members will support this undertaking by purchasing enough copies to ensure the Society against loss. In no more effective way could they help the Society to carry on its work, for it is obvious that its ordinary revenues are insufficient to do more than assist in excavations and publish such preliminary reports as space can be found for in the Journal alongside of the other important contributions which are always available. For any completer publication special funds must be raised, and the readiest method seems to be that members should be willing to purchase such extra publications at cost price. The only alternatives would be a Special Publication Fund, or an increase in the annual subscription to meet such contingencies. For it is not to be supposed that members of this Society would be content to leave the results of important researches without any adequate publication.

It may be of interest to members to know that the Society has been invited to send representatives to the celebration of the Tercentenary of the Bodleian Library at Oxford in October next. The President of the Society, Sir Richard Jebb, and the Hon. Secretary, Mr. Macmillan, have been deputed to represent the Society on this interesting occasion.¹

¹ For the text of the Latin Address presented on the occasion, and written by the President of the Society, see p. xlii.

Library Report.

The statistics of work done in the Library again show considerable progress. The number of visits paid to the Library was 343, compared with 236 in 1900-1901, and 190 in 1899-1900. On the other hand, there was a reduction in the number of members using the Library, which was 66, compared with 81 and 70. These figures seem to show that though the number of readers has not increased during the year, the Library is becoming more serviceable for purposes of study. The number of volumes borrowed was 247, compared with 199 and 156 in the two previous years.

The Council have decided that the time has now come when it is expedient to print the Library Catalogue. The list of accessions has been printed year by year, and a list of periodical publications has been given in recent volumes of the *Journal*. No catalogue however has been printed, except the brief list given in volume viii. of the *Journal*, and it seems likely that a new catalogue will greatly increase the usefulness of the Library both for visitors, and for members at a distance. The revised draft is now nearly ready for press, and will, it is hoped, be distributed to members in the autumn.

The Overbeck tracts (about 700 in number) described in the last Report have been arranged and bound. They will be entered in the forthcoming catalogue.

The purchases of the year include :

Corpus Inscriptionum Atticarum
Tischbein, Hamilton Vases.

Also six volumes, which were wanting or imperfect in the Society's set of the *Revue Archéologique*.

The *Notizie degli Scavi* have been added to the list of periodicals.

Thanks are due to the Trustees of the Hunterian Collection, for the second volume of the Catalogue of Greek Coins. Thanks are also due to the following donors of books : The Delegates of the Clarendon Press, Messrs. Methuen and Messrs. B. T. Batsford ; also to Mr. F. S. Benson, Mr. E. R. Bevan, M. Gaspar, Mr. J. F. Hewitt, Dr. W. Leaf, Sir E. Maunde Thompson, K.C.B., and Dr. P. Wolters.

Photographic Collection.

The year 1901-2 has been a period of steady extension, and increased use of the collection. Donations of slides,—amounting to sixty-two in all, and dealing chiefly with the antiquities of Olympia and with Greek athletics—have been received from Messrs. Dyer, N. Gardiner, Awdry, Kaines Smith, and A. H. Smith ; Mr. R. A. Hardy has allowed a selection of prints to be made from his negatives for incorporation in the reference collection ; and Mrs. S. Arthur Strong has deposited a series of some 120 negatives

from which slides or prints may be obtained by members. The thanks of the Society are due to those members who have given their help in this way.

The slide collection has been used by twenty-seven persons, for teaching purposes, and the number of slides hired in all has risen greatly. The sales of slides for private use have also increased, and include large orders from the University of Sydney, N.S.W., and from American subscribers.

Substantial progress has been made with the work of indexing and cross-referencing the whole collection, and a few inadequate slides and negatives have been replaced by better examples.

Finance.

The Balance Sheet shows the present financial position of the Society. Ordinary receipts during the year were £1022, against £1037 during the financial year 1900-1901. The receipts from subscriptions, including arrears, amount to £641, against £646, and receipts from libraries, and for the purchase of back volumes £185, against £179. Life subscriptions amounting to £78, donations £3, and for lantern slides £19 have also been received.

The ordinary expenditure for the year amounts to £665 against £716. Payments for rent £80, insurance £15, salaries £60, are the same as in the preceding year. Sundry printing, postage, and stationery accounts show a reduction of £20; the cost of purchases for the Library shows £83 against £74, and of lantern slides £16. The net cost of the *Journal*, Vol. XXI., amounts to £367, against £382. The usual grant of £100 was made to the British School at Athens, and a grant of £100 to the Cretan Exploration Fund. The balance carried forward at the close of the year under review amounts to £409, against £252 at the end of the previous financial year.

The expenditure on the facsimile of the Codex Venetus of Aristophanes is shown in a separate account.

Forty-nine new members have been elected during the year, while thirty-seven have been lost by death or resignation. The present total of subscribing members is 759, and of honorary members 25, the names of Professors Federico Halbherr and Adolf Wilhelm having been added to the roll of honorary members.

Six new libraries have joined the list of subscribers, and five have stopped payment, making the number at the present time 143, or with the five public libraries 148.

Conclusion.

The present year, like most of its predecessors, may be described as a prosperous, if uneventful, one for the Society. The steady increase of numbers—the present year shewing a net gain of twelve—is a favourable sign

that the Society is continuing to extend its influence; and the fact that two distinguished members of the present Government have joined its ranks during the year may be taken as a happy augury that classical archaeology is in a due way to a more adequate recognition by the State than hitherto. We may still hope that the time will come when we shall no longer be behind France and Germany in this respect. Meanwhile it is to be earnestly desired that individual members will bear in mind the opportunities open to all of them for furthering the Society's interests by making known its work to the outside world and increasing the number of its members.

In the matter of finance, the Society may congratulate itself on an increased balance for the year and a satisfactory outlook for the future. On the other hand, with the publications of the Aristophanes facsimile and of the Phylakopi excavations in view there can be no question at present of further investments of capital.

The adoption of the Report was seconded by M. Bikelas, and the motion was unanimously carried.

Mr. Arthur Evans then made a statement on the results of his work at Knossos during the past season, illustrated by diagrams and lantern-slides. The season's work in the Palace of Knossos, which began on February 12, and was continued to June, was fertile beyond all anticipation. Besides the chambers that remained to be explored immediately contiguous to the Hall of the Double Axes and that of the Colonnades, excavated last year, the whole building was found to have a considerably larger extension on the eastern side than had been expected. The building was thus seen to have climbed down the slope in descending terraces to a point some 90 metres east of the northern entrance. Considerable remains were uncovered of the eastern boundary wall, or rather of four separate walls in immediate contiguity to each other. The new rooms adjoining the principal halls of the central part of the eastern quarter proved of great interest. South of the Hall of the Double Axes was a chamber flanked on two sides by colonnades and light areas, and provided with a small bathroom and a private staircase leading to the upper rooms. Throughout all this region it has been possible to support a large part of the upper story, and a most elaborate system of drainage has been found, including latrines and drain pipes of advanced construction. Further fine remains of fresco had come to light—naturalistic foliage and lilies, an aquarium of fish, and a lady in a jacket and diaphanous chemise. It has also been possible to reconstitute an important panel of wall painting from a room excavated last year, giving a complete and highly sensational scene from the bull ring, in which girl toreadors took part. Large fresh deposits of inscribed tablets had come to light with ideographic signs, such as swords and granaries and those indicating persons of both sexes. The largest deposit referred to percentages—some, with the throne and sceptre sign before the amount, apparently recording the

king's portion. A piece of a Mycenaean painted vase with linear characters and two cups with inscriptions written within them in a kind of ink supplied wholly new classes of written documents. Great numbers of clay seal impressions were brought out, including a fragment of one stamped by a late Babylonian cylinder. In magazines below the later palace level, and belonging therefore to an earlier building, occurred seal impressions with pictographic signs, together with an abundance of painted pottery of the 'Kamares' or 'Early Minoan' class, including specimens which for egg-shell-like fineness of fabric and beauty of form and hue have certainly never been surpassed.

Among the finds of smaller objects two stood out respectively as of first-rate importance in the history of architecture and sculpture. One of these was the discovery of parts of a large mosaic consisting of porcelain plaques, a series of which represent the fronts of houses of two or three stories. Fragmentary as most of these were, it was possible to reconstitute a fair number with absolute certainty, and thus to recover an almost perfect picture of a street of Minoan Knossos in the middle of the second millennium before our era. The different parts of the construction—masonry, woodwork, and plaster—were clearly reproduced, and the houses, some of them semi-detached, with windows of four and six panes—oiled parchment being possibly used for glass—were astonishingly modern in their appearance. Other plaques found with them show warriors, and various animals, a tree, a vine, and flowing water, so that the whole seems to have been part of a large design analogous to that of Achilles's shield. The other find—made towards the close of the excavation—which threw a new light on the art of Daedalus, is the discovery of remains of ivory figurines. These are carved in the round, the limbs being jointed together, and, to judge by the most perfectly preserved, they seem to have represented youths in the act of springing, like the cowboys of the frescoes. The life and balance of the whole, the modelling of the limbs, and the exquisite rendering of details, such as the muscles and even the veins, raise these ivory statuettes beyond the level of any known sculpture of the kind of the period to which they belong. The hair was curiously indicated by means of spiral bronze wires, and the amount of gold foil found with them suggests that they had been originally, in part at least, coated with gold, in which case they would have been early examples of the chryselephantine process. The new materials bearing on the local religion are extraordinarily rich. Remains of a miniature temple of painted terra-cotta, with doves perched above the capitals of columns, occurred in a stratum belonging to the pre-Mycenaean building. In the palace itself a series of finds illustrated the cult of the Double Axe and its associated divinities. A gem showed a female figure—apparently a goddess—bearing this sacred emblem. But more important still was the discovery of an actual shrine belonging to the latest Mycenaean period of the palace, with the tripod and other vessels of offering still in position before a base, upon which rested the actual cult objects, including a small double

axe of steatite, sacred horns of stucco with sockets between them for the wooden shafts of other axes, terra-cotta figures of a goddess, cylindrical below, and in one case with a dove perched on her head, and of a male votary offering a dove. Of great interest also was the discovery in an eastern corridor of the palace of a decorative wall-painting, consisting of a series of labyrinths, more elaborate than those of the later coins of Knossos. Owing to the constant need of supporting the upper story, much of the work has been of a difficult and at times dangerous nature, entailing much work from carpenters and masons. Vast masses of earth had also to be removed from parts of the site, and nearly 250 workmen were constantly employed. Throughout the whole Mr. Evans had the devoted assistance of Dr. Mackenzie in superintending the excavation, and of Mr. Fyfe on the architectural side. There still remained a certain amount of delimitation and further exploration of the strata below the later palace to be carried out next season.

Mr. R. Carr-Bosanquet, Director of the British School, also gave an account of his excavations at Palaeo-Kastro, in Crete, illustrated by diagrams. Interesting remains of Mycenaean houses had been discovered, and numerous tombs investigated, with some very interesting results in painted vases.

The former President and Vice-Presidents were re-elected, and Messrs. George Macdonald and E. E. Sikes were elected to vacancies on the Council.

The usual votes of thanks to the Auditors and the Chairman closed the proceedings.

*Text of Address presented to the University of Oxford at the celebration of
the Tercentenary of the Bodleian Library, October, 1902.*

ACADEMIAE OXONIENSI

SOCIETAS GRAECA STUDIA COLENTIUM LONDINENSIS

S. D. P.

Gratias vobis, Viri clarissimi, agimus habemusque maximas quod ad celebranda Bibliothecae vestrae natalicia, Thomae Bodley opera abhinc annos trecentos instauratae, a Societate nostra legatos adesse voluistis. Neque dubium nobis quidem videtur quin singularis vestra erga nos humanitas Fundatoris ipsius ingenio ac voluntati feliciter respondeat, qui, qua fuit animi magnitudine praeditus, non Almae Matri solum sed toti litteratorum reipublicae beneficium illud immortale comparaverit. Id autem Societati nostrae est propositum, ut ad rerum Graecarum studia colenda atque augenda, quantum possit, opituletur; quae studia vester ille, ut erat humanarum artium fautor acerrimus, iam ab ineunte aetate penitus dilexit. Beroaldum Graecos scriptores praelegentem Genevae puer audivit, Homeri carmina Robertum Constantinum magistrum adeptus evoluit; mox adolescens Oxonii Collegio Mertonensi ascriptus ipse Graecas litteras publice docuit. Iure igitur Societas nostra, cuius inter auctores Carolus Newton alique Oxonienses in hoc genere disciplinae principes numerantur, pietatis vestrae documentis suae quoque observantiae testimonium libenter adiungit. Floreat semper Academiae vestrae insigne ornamentum, doctrinae liberalis adiutrix atque lux, magna illa Bibliotheca, cuius limen quoties intramus, Thomae Bodley memoriam gratis animis recordamur.

Datum Londini Kal. Oct. MCMII.

“THE JOURNAL OF HELLENIC STUDIES” ACCOUNT FOR THE YEAR ENDING 31ST MAY, 1902.

| | £ | s. | d. | £ | s. | d. |
|---|-----|----|----|------|----|----|
| To Sales of Journal, July 1, 1900, to June 30, 1901 | 122 | 9 | 9 | | | |
| " Advertisements in Journal | 9 | 6 | 6 | | | |
| " Balance, to Cash Account | | | | 131 | 16 | 3 |
| | | | | 366 | 18 | 5 |
| | | | | | | |
| | | | | £498 | 14 | 8 |

CASH ACCOUNT.

| | £ | s. | d. | £ | s. | d. |
|--|-----|----|-----|--------|----|-----|
| To Balance at 31st May, 1901 | 249 | 8 | 8 | | | |
| " Petty Cash | 2 | 4 | 11½ | | | |
| " Members' Subscriptions, 1901—1902 | 628 | 0 | 0 | 251 | 13 | 7½ |
| " Arrears | 12 | 12 | 0 | | | |
| " Life Subscriptions | | | | 640 | 12 | 0 |
| " Entrance Fees | | | | 78 | 15 | 0 |
| " Library Subscriptions, 1901—1902 | | | | 51 | 9 | 0 |
| " Back Volumes of Journal | | | | 167 | 16 | 0 |
| " Donations, F. D. Mocatta, Esq. | | | | 17 | 10 | 0 |
| " Dividends on New South Wales 3½ per cent. | | | | 3 | 3 | 0 |
| Stock—Oct. 1, 1901 | 18 | 13 | 9 | | | |
| April 1, 1902 | 18 | 13 | 9 | | | |
| Corporation of Nottingham 3 per cent.—Nov. 1, 1901 | 2 | 6 | 3 | | | |
| May 1, 1902 | 2 | 6 | 3 | | | |
| " Library Account—Sales of Duplicates, Fines, &c. | | | | 42 | 0 | 0 |
| " Lantern Slides Account | | | | 1 | 13 | 7 |
| " Royalties on Sale of Photographs | | | | 19 | 8 | 0¼ |
| | | | | 4 | 0 | |
| | | | | £1,274 | 4 | 3 |
| To Balance at Bankers, 31st May, 1902 | 395 | 4 | 10 | | | |
| " Petty Cash | 14 | 4 | 0¼ | | | |
| | | | | £409 | 8 | 10½ |

| | £ | s. | d. | £ | s. | d. |
|---|---|----|----|------|----|----|
| By Vol. XXI., Parts I. and II. Printing (including carriage)..... | | | | 312 | 3 | 6 |
| " Plates | | | | 42 | 6 | 1 |
| " Drawing and Engraving | | | | 42 | 1 | 5 |
| " Paper | | | | 50 | 13 | 8 |
| " Editing | | | | 50 | 0 | 0 |
| " Translating | | | | 1 | 10 | 0 |
| | | | | £498 | 14 | 8 |

| | £ | s. | d. | £ | s. | d. |
|---|--------|----|-----|----|----|----|
| By Rent, one year to Dec. 1900.. | | | | 80 | 0 | 0 |
| " Insurance..... | | | | 15 | 0 | 0 |
| " Salaries, Asst. Librarian, one year to 31st May, 1902 | 40 | 0 | 0 | | | |
| " Asst. Secretary, one year to 31st May, 1902 | 20 | 0 | 0 | | | |
| " Library Account—Books and Petty Cash | | | | 60 | 0 | 0 |
| " Sundry Printing, Postage, and Stationery | | | | 81 | 17 | 9½ |
| " Lantern Slides..... | | | | 41 | 9 | 6 |
| " Commission and Postage, per Bank | | | | 16 | 10 | 9 |
| " Grants— | | | | 2 | 18 | 11 |
| The British School at Athens..... | 100 | 0 | 0 | | | |
| Cretan Exploration Fund..... | 100 | 0 | 0 | | | |
| " Balance of Journal Account | 395 | 4 | 10 | | | |
| " at Bankers..... | 366 | 18 | 5 | | | |
| " Petty Cash..... | 14 | 4 | 0¼ | | | |
| | 409 | 8 | 10½ | | | |
| | £1,274 | 4 | 3 | | | |

ARISTOPHANES FACSIMILE FUND.

| | £ | s. | d. | £ | s. | d. |
|---|------|----|----|------|----|----|
| 1900—June 13. American Archaeological Institute | 100 | 0 | 0 | | | |
| 1901—April 11. " " | 200 | 0 | 0 | | | |
| October 11. Subscription | 6 | 6 | 0 | | | |
| | | | | £306 | 6 | 0 |
| Balance brought forward..... | £131 | 0 | 6 | | | |

| | £ | s. | d. | £ | s. | d. |
|--|------|----|----|---|----|----|
| 1900—November 1. Oreste Bertani | 80 | 0 | 0 | | | |
| 1901—January 18. Prof. Leoni Levi..... | 13 | 10 | 0 | | | |
| June 12 Oreste Bertani (balance) | 27 | 17 | 6 | | | |
| November 9. Clarendon Press (Prospectus) | 33 | 18 | 0 | | | |
| 1902—April 1. T. W. Allen, Esq. (Introduction) | 20 | 0 | 0 | | | |
| Balance forward | 131 | 0 | 6 | | | |
| | £306 | 6 | 0 | | | |

We have examined this account, compared it with the vouchers and bankers' book, and find it correct.

DOUGLAS W. FRESHFIELD, *Hon. Treasurer.*

20th June, 1902.

{ARTHUR JOHN BUTLER,
{STEPHEN SPRING-RICE,
Auditors.

A comparison with the receipts and expenditure of the last ten years is furnished by the following tables:—

ANALYSIS OF ANNUAL RECEIPTS FOR THE YEARS ENDING :—

| | 31 May, 1893. | 31 May, 1894. | 31 May, 1895. | 31 May, 1896. | 31 May, 1897. | 31 May, 1898. | 31 May, 1899. | 31 May, 1900. | 31 May, 1901. | 31 May, 1902. |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Subscriptions | £ 564 | £ 671 | £ 678 | £ 645 | £ 617 | £ 613 | £ 598 | £ 634 | £ 636 | £ 628 |
| Arrears | 13 | 44 | 14 | 9 | 4 | 13 | 18 | 9 | 10 | 13 |
| Life Compositions | 95 | 79 | 50 | 63 | 15 | . | 32 | 63 | 78 | 78 |
| Libraries and Back Vols. | 161 | 186 | 122 | 117 | 125 | 118 | 122 | 163 | 179 | 185 |
| Entrance Fees | | | | | | | | 33 | 45 | 52 |
| Dividends | 39 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 42 | 42 |
| Special Receipts— | | | | | | | | | | |
| Mr. D. G. Hogarth (Alex- andria Grant Refunded) | ... | ... | . | 30 | . | . | . | ... | .. | .. |
| Loan and sale of Lantern Slides | 4 | 4 | 2 | 7 | 5 | ... | 4 | 3 | 30 | 19 |
| Clichés | . | . | . | . | 3 | ... | .. | . | .. | .. |
| Library Receipts | ... | ... | . | .. | .. | .. | . | 2 | 2 | 2 |
| Royalty on and Sales of Photographs | 2 | 2 | 1 | 1 | .. | 2 | . | 2 | 1 | .. |
| Donations— | | | | | | | | | | |
| F. D. Mocatta, Esq. | | ... | ... | .. | . | . | 3 | 3 | 3 | 3 |
| E. H. Egerton, Esq. | . | 5 | ... | ... | ... | .. | . | .. | .. | .. |
| H. G. Hart, Esq. | .. | ... | ... | .. | ... | . | . | 5 | ... | ... |
| Miss E. C. Stevenson | ... | ... | ... | . | . | . | ... | .. | 11 | .. |
| Library | ... | .. | ... | .. | ... | .. | . | ... | ... | ... |
| W. Arkwright, Esq. | ... | ... | .. | ... | 3 | . | .. | .. | .. | . |
| | 878 | 1,034 | 910 | 915 | 816 | 789 | 820 | 960 | 1,037 | 1,022 |
| Balance from preceding year ... | 239 | 259 | 214 | 169 | 340 | 360 | 201 | 61 | 131 | 252 |
| | 1,117 | 1,293 | 1,124 | 1,084 | 1,156 | 1,149 | 1,021 | 1,021 | 1,168 | 1,274 |

ANALYSIS OF ANNUAL EXPENDITURE FOR THE YEARS ENDING :—

| | 31 May, 1893. | 31 May, 1894. | 31 May, 1895. | 31 May, 1896. | 31 May, 1897. | 31 May, 1898. | 31 May, 1899. | 31 May, 1900. | 31 May, 1901. | 31 May, 1902. |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Rent | £ 50 | £ 73 | £ 80 | £ 80 | £ 80 | £ 80 | £ 80 | £ 80 | £ 80 | £ 80 |
| Insurance | 11 | 11 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Salaries | 49 | 49 | 49 | 47 | 52 | 50 | 60 | 60 | 60 | 60 |
| Library | 41 | 75 | 96 | 39 | 94 | 93 | 61 | 73 | 74 | 82 |
| Sundry Printing, Postage, and Stationery | 71 | 49 | 49 | 46 | 29 | 45 | 32 | 58 | 61 | 41 |
| Lantern Slides Account | | . | .. | .. | ... | 24 | ... | 13 | 29 | 17 |
| Photographs Account | .. | .. | ... | .. | .. | ... | 26 | 1 | 15 | ... |
| Cost of Journal (less sales) | 532 | 475 | 441 | 394 | 346 | 516 | 536 | 390 | 382 | 367 |
| Grants | 100 | 185 | 225 | 100 | 180 | 125 | 150 | 200 | 200 | 200 |
| Investments | . | 158 | .. | . | . | ... | . | .. | ... | ... |
| Commission and Postage per Bank | ... | ... | ... | ... | .. | ... | ... | ... | ... | 3 |
| Egypt Exploration Fund—1,100 copies of Mr. Hogarth's Report | ... | ... | .. | 23 | ... | .. | ... | ... | ... | .. |
| Photo Enlargements, Albums, | 4 | 4 | ... | .. | ... | ... | ... | .. | .. | ... |
| | 858 | 1,079 | 955 | 744 | 796 | 948 | 960 | 890 | 916 | 865 |
| Balance | 259 | 214 | 169 | 340 | 360 | 201 | 61 | 131 | 252 | 409 |
| | 1,117 | 1,293 | 1,124 | 1,084 | 1,156 | 1,149 | 1,021 | 1,021 | 1,168 | 1,274 |

PROCEEDINGS OF THE CAMBRIDGE BRANCH OF
THE HELLENIC SOCIETY.

SESSION 1901-1902.

On Saturday, November 30, 1901, a meeting was held in the rooms of Mr. W. G. Headlam, King's College.

Two papers were read, one by Miss J. Harrison on *The κηρύκειον of Hermes*, the other by Mr. A. B. Cook on *The gong at Dodona*. The former, dealing fully with the literary and monumental evidence of the subject, investigated the double aspect of the *caduceus* as (*a*) a herald's staff and (*b*) a magic wand. The latter paper, which included a proposed restoration of the Dodonaean gong, has since been published in this Journal (vol. xxii. pp. 5-28). Both papers were followed by a discussion in which Dr. Sandys, Prof. Ridgeway, and others took part.

THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES.

COLLECTION OF PHOTOGRAPHS AND LANTERN SLIDES.

The Photographic Collection consists of the following sections :—

- A. A Reference Collection of Photographic Prints.
- B. A Loan Collection of Photographic Prints, Diagrams and duplicate Plates from various Publications.
- C. A Loan Collection of Lantern Slides.
- D. A Collection of Negatives from which Prints and Lantern Slides may be made as they are required.
- E. A Collection of Enlargements suitable for Class-rooms and Libraries.

A. *The Reference Collection* contains Prints from every suitable negative in Section D 1 below ; from negatives in private hands, which have been submitted for registration under the conditions of Section D 2 ; and from the principal series published by professional photographers in Great Britain and abroad ; and includes prints from the negatives of the Lantern Slides in Section C. Thus the Reference Collection forms an illustrated catalogue of the Slides for the convenience of intending borrowers. This Collection is confined to the Society's Library, in the same manner as the rarer Engravings and Plates. The Prints are mounted, some in albums, but the majority separately, for convenience of consultation, on substantial card mounts of uniform sizes.

The Collection contains already some 4,000 Prints. It is at present fairly complete in views of Sites and Monuments in Greece proper ; and poorest in views of Greek Sites elsewhere than in mainland Greece—and particularly in the Islands, in Asia Minor, and in Sicily and Magna Graecia. It is also far from adequate in regard to Works of Art other than Sculptures and Vases ; and particularly in regard to Coins and Inscriptions.

A *Catalogue*, which will eventually be printed, is already in use in the Library, and is arranged—

- (1) In geographical order, for views of sites and monuments *in situ*.
An abstract of this list will be found printed below (p. lxiii. ff.).
- (2) In historical order, for works of art and their subjects, types and styles.
- (3) In alphabetical order, for mythological or historical persons, museums and collections, &c.

The Catalogue records also (1) the subject of the Photograph; (2) the name of the Photographer; (3) the whereabouts of the Negative; (4) the reference number of the Lantern Slide or Loan Print of the same subject, where such exists; and (5) the price of a similar Print, or a Lantern Slide, if ordered through the Assistant Librarian on the terms stated below.

In all but a very few cases, duplicates of the prints in this Collection may be obtained through the Assistant Librarian on the terms stated below (p. xlix).

B. *The Loan Collection of Prints and Diagrams* contains duplicates of select Photographic Prints in the Reference Collection; and other Views, Diagrams, Plans, and Sketches of sites and objects, which are not otherwise easily accessible to teachers. These will be lent for short periods, to duly qualified persons, in illustration of lectures and tuition, on such terms as will fairly cover the cost of maintenance and carriage. They are being mounted and stored in the same way as the Reference Collection; and will before long be ready for circulation in waterproof portfolios inclosed between substantial boards.

C. *The Loan Collection of Lantern Slides* has been in working order for some years already. A Catalogue was published in 1897 (*J.H.S.* xvii. p. liii. ff.), and a Supplementary Catalogue, in 1900 (*J.H.S.* xx. p. li. ff.). A further Supplementary Catalogue, including important new series of slides of 'Prehistoric Greece,' 'Olympia,' &c. will be found on pp. liv. ff. below.

Until further notice, Slides should be quoted, in borrowing, by their numbers in the Catalogue of 1897 and its supplements. Additions are being made as opportunities occur.

The Regulations for the use of Slides will be found at the head of each of the Lists of Slides above-mentioned. The Catalogue of 1897, with the supplements of 1900-2 may be obtained separately from the Assistant Librarian: price 6*d.*, or post free 7½*d.*, prepaid.

Members of the Hellenic Society are further reminded that, under an agreement with the Educational Museum of the Teachers' Guild, they are entitled to make use of the Slide Collection of the Hellenic Association (cf. *J.H.S.* xx. p. lxiii.), the Catalogue of which may be obtained from the Assistant Librarian of the Hellenic Society.

D. *The Collection of Negatives* consists at present of two parts.

- (1) Numerous negatives have been either made for the Society, or presented, or kindly deposited on loan by private individuals for the use of

the Members. These negatives are deposited with a professional photographer, who is responsible to the Society for their safety. Orders for prints and lantern-slides from these negatives should be sent through the Assistant Librarian, and will be executed in accordance with a scale of charges, which is printed below, and is arranged to cover the bare cost and working expenses of the Collection.

Members of the Society, who possess suitable negatives, for which they have no immediate use themselves, but which they desire to make available for use by other students of Hellenic subjects, are invited to deposit them with the Society either permanently or temporarily, on the terms outlined above.

(2) Private collections of negatives have been from time to time deposited by their owners with professional photographers who are authorised to make prints or lantern slides to order, for Members and other properly qualified persons, at approximately cost price.

Prices of Prints made to order:—

| Ordinary Silver Prints each | s. | d. | Bromide Prints each | s. | d. |
|---|----|----|---------------------|----|----|
| $3\frac{1}{4} \times 3\frac{1}{4}$ (slide negative) | 0 | 2 | . | 0 | 3 |
| $4\frac{1}{4} \times 3\frac{1}{4}$ (quarter plate) | 0 | 2 | . | 0 | 3 |
| 5×4 | 0 | 3 | . | 0 | 4 |
| $6\frac{1}{2} \times 4\frac{1}{2}$ (half plate) | 0 | 4 | . | 0 | 5 |
| $8\frac{1}{2} \times 6\frac{1}{2}$ (whole plate) | 0 | 6 | . | 0 | 8 |
| 10×8 | 0 | 9 | . | 0 | 10 |
| 12×10 | 1 | 0 | . | 1 | 3 |
| 15×12 | 1 | 6 | . | 1 | 9 |

Prices of Lantern Slides made to order:—

s. d.

| | | | |
|--|------|---|---|
| Duplicates of Slides in the Society's Slide Catalogue, or from other negatives in the Society's pos- session | from | 0 | 9 |
| Slides made from Photographs, Drawings, or En- gravings in the Society's Library or elsewhere, of which no negative exists already | from | 1 | 6 |

N.B.—The above are the customary charges, but the right is reserved to charge at a higher rate in cases where for any reason the actual cost-price exceeds the customary charge.

N.B.—Bromide enlargements, up to $30'' \times 20''$, which are convenient for class-room purposes, and for small lectures, can be made from the majority of the negatives in the collection, and may be obtained at proportionate prices.

E. The Collection of Enlargements for Class-rooms and Libraries.

Through the generosity of the proprietors of the negatives, the Society has been enabled to arrange with the Autotype Company for the enlargement, by permanent process, of twenty-five views taken in Athens and twenty-three views taken in Sicily by Mr. W. J. Stillman; of seventeen views taken in

various parts of Greece by Mr. Walter Leaf; of ten by Mr. R. Elsey Smith; and of six by Mr. J. Thacher Clarke.

The prints, which measure about 17 × 13 inches, are supplied by the Autotype Company, 74 New Oxford Street, to members of the Society at the rate of 3s. each unmounted, and 4s. 6d. each mounted. The price of the photographs to the general public is considerably higher. A list of the subjects is appended (below, and a complete set of proofs of the photographs may be seen at the Society's Library.

To avoid mistakes in ordering these enlargements, the number of each photograph in the list, as well as its subject, should be given.

LIST OF ENLARGEMENTS FROM

MR. STILLMAN'S PHOTOGRAPHS OF ANCIENT ATHENS.

- | | | | |
|----|--|----|--|
| 1 | Acropolis and Theseion | 15 | Erechtheion—East Side. |
| 2 | Acropolis—from the Museum Hill | 16 | Erechtheion—Interior of Cella. |
| 3 | Acropolis—from the Stadion | 17 | Erechtheion—Architectural Details. |
| 4 | Acropolis—from the Hill of the Nymphs | 18 | Caryatid. Single Figure from the Erechtheion |
| 5 | Temple of Wingless Victory—from the Propylaea. | 19 | Theatre of Herodes Atticus—Interior |
| 6 | Doorway of Pandroseion | 20 | Theatre of Dionysos—General View of Interior |
| 7 | Portico of Pandroseion | 21 | Theatre of Dionysos—from the South, showing Auditorium |
| 8 | Parthenon—East Front | 22 | Propylaea—from the S.W. |
| 9 | Parthenon—from the N.E. | 23 | Propylaea and North Wing |
| 10 | Part of Frieze of the Parthenon (<i>in situ</i>) | 24 | Temple and Precincts of Asklepios |
| 11 | East Portico of the Parthenon | 25 | Old Cathedral of Athens |
| 12 | West Portico of the Parthenon | | |
| 13 | Erechtheion—from the Parthenon | | |
| 14 | Erechtheion—West Side | | |

LIST OF ENLARGEMENTS FROM

MR. STILLMAN'S PHOTOGRAPHS OF SICILY.

- | | | | |
|----|---|----|---|
| 1 | Grecian Theatre Syracuse | 14 | Area of Temple of Jupiter, Girgenti, and Asphodel Field |
| 2 | Temple of Concord, Girgenti | 15 | Temple at Segesta |
| 3 | Temple of Concord, Girgenti—East Face | 16 | Temple at Segesta—from the South |
| 4 | Temple of Concord, Girgenti—Eastern Portico | 17 | Temple at Segesta—Interior |
| 5 | Temple of Concord, Girgenti—Interior | 18 | Flank of Temple at Segesta—showing curve of Stylobate and bosses for lifting the stone. |
| 6 | Temple of Concord, Girgenti—Interior taken with wide angle lens | 19 | Selinus—the Acropolis |
| 7 | Girgenti from Temple of Concord | 20 | Selinus—Main Temple on East Side |
| 8 | Temple of Juno, Girgenti | 21 | Selinus—Ruins on East Side of River |
| 9 | Temple of Juno, Girgenti—from the West | 22 | Greek Tombs, Syracuse. |
| 10 | Temple of Juno, Girgenti—distant view | 23 | Latomia (quarries), Syracuse—Prison of the Athenian Army |
| 11 | Girgenti from Temple of Juno | | |
| 12 | Temple of Castor and Pollux, Girgenti | | |
| 13 | Temple of Hercules, Girgenti | | |

LIST OF ENLARGEMENTS FROM
MR. WALTER LEAF'S PHOTOGRAPHS.

- | | |
|---|--|
| 1 Athens from the Monument of Philopappos | 10 Aegina—Temple from S. E. |
| 2 Temple of Sunium—from N. E. | 11 Aegina, Temple—another view |
| 3 Temple of Sunium—East End | 12 Mycenae—Citadel from S. |
| 4 Temple of Corinth | 13 Mycenae—Mis. Schliemann's Treasury |
| 5 Delphi—General View | 14 Megalopolis—Theatre and Site of City from S. |
| 6 Delphi—Peribolos Wall and Stoa of the Athenians | 15 Megalopolis—Theatre and View of Cavea |
| 7 Eleusis—Remains of the Hall of the Mysteries | 16 Tiryns—Sallyport and Ancient Staircase |
| 8 Eleusis—Precinct of Pluto | 17 Tiryns—the Great Portal |
| 9 View of St. Luke, Stiris—Parnassus in the background | |

LIST OF ENLARGEMENTS FROM
MR. ELSEY SMITH'S PHOTOGRAPHS.

- | | |
|--|-----------------------------------|
| 1 Athens—The Propylaea | 6 Olympia—the Temple of Zeus |
| 2 Epidaurus—Theatre | 7 Tiryns—Approach to Great Portal |
| 3 Olympia—Pediment from Temple of Zeus | 8 Athens—Theatre of Dionysus |
| 4 Aegina—Temple | 9 Athens—Porch of Erechtheum |
| 5 Olympia—Hermes and Infant Dionysus | 10 Mycenae—The Lion Gate |

LIST OF ENLARGEMENTS FROM
MR. THACHER CLARKE'S PHOTOGRAPHS.

- | | |
|---|--|
| 1 Acrocorinthos and Ruins of Temple | 5 Gate of Lions, Mycenae. |
| 2 Portal of 'Treasury of Atreus,' Mycenae | 6 Ancient Quarries at Syracuse (Prison of the Athenians). |
| 3 Interior of Temple of Bassae, Arcadia | |
| 4 The Pnyx, Athens—Rear Wall of Auditory from S. E. Corner | |

SECOND LIST OF ADDITIONS

TO THE

COLLECTION OF LANTERN SLIDES,

1900—1902.

THE following list forms a Second Supplement to the Catalogue of the Society's Collection of Lantern Slides, published in Vol. XVII. of the *Journal of Hellenic Studies*, p. liv.: compare also the First Supplement, published in Vol. XX, p. li.

The Regulations for their use are as follows:—

1. The slides shall be lent only to members of the Society, or to members of the Teachers' Guild who desire to use them for the purposes of demonstration.
2. Those members who have presented slides to the Society shall have a right to the free loan of two slides annually for every slide thus presented.
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3. For the loan of slides beyond this number, and for loans to members who have not presented slides, a charge of 3*d.* for each slide shall be made. If the slides are returned within three days, the charge will be reduced from 3*d.* per slide to 2*d.*
4. All applications must be made to the Assistant Librarian, Hellenic Society, at 22 Albemarle Street. In each case, every slide must be quoted by its number, and in the case of the lists of 1897 and 1900 by the letter or letters which denote the series in which it occurs: *e.g.* the first slide on p. lx. of *J.H.S.* xx. should be quoted as *Sa* 62. If desired, slides will be packed and forwarded to any address within the United Kingdom *at the risk and cost of the borrowers*. Such slides are reckoned to be at the risk of the borrower until they have been received by the Assistant Librarian.
5. The sum of half-a-crown must be paid for every slide broken while at the risk of the borrowers; save that in cases where the total damage done on the same occasion exceeds 10*s.*, the Library Committee *may*

remit the remainder of the fine over and above the cost of repairing the damage.

6. The slides may be kept for a period not exceeding fourteen days. If for exceptional reasons it is required to keep them for a longer period, special application must be made to the Library Committee. Slides required at a particular date may be booked for not more than three months in advance.

The slides in the topographical classes are mainly from negatives taken by members of the Hellenic Society. A few have been taken, by permission, from the photographs of the German Archaeological Institute.

Those in classes P and S are for the most part taken from the originals, but in some cases from engravings, etc. In the case of sculpture, slides marked with * have been taken by photographic methods from the originals; if marked † they have been derived from casts. If not thus distinguished they have been taken from drawings and engravings.

In class V, most of the slides are derived from published illustrations. Where there is a choice of publications, reference is made by preference to that which was used for making the slide, except when it is difficult of access.

The following is a list of the principal contractions employed :—

| | |
|-----------|--|
| A.M. | <i>Mittheilungen des Arch. Inst., Athenische Abtheilung.</i> |
| A.Z. | <i>Archaeologische Zeitung.</i> |
| B.C.H. | <i>Bulletin de Correspondance Hellénique.</i> |
| B.D. | <i>Baumeister, Denkmäler.</i> |
| B.M. | <i>British Museum.</i> |
| B.S.A. | <i>Annual of the British School of Archaeology in Athens.</i> |
| Conze. | <i>Conze, Die Attischen Grabreliefs.</i> |
| E.E.F. | <i>Egypt Exploration Fund. Annual Report.</i> |
| Gardner. | <i>E. A. Gardner, A Handbook of Greek Sculpture.</i> |
| G.A.V. | <i>Gerhard, Ausserlesene Vasenbilder.</i> |
| H.B. | <i>Overbeck, Gallerie heroischer Bildwerke.</i> |
| J.H.S. | <i>Journal of Hellenic Studies.</i> |
| Jahrbuch. | <i>Jahrbuch des K. Deutschen Arch. Instituts.</i> |
| K.B.H. | <i>Ohnefalsch Richter, Kypros, the Bible, and Homer.</i> |
| M.d.I. | <i>Monumenti inediti dell' Istituto Archeologico.</i> |
| Mich. | <i>Michaelis, Der Parthenon.</i> |
| Mon. Ant. | <i>Monumenti Antichi.</i> |
| Myc. | <i>Schliemann, Mycenae. 1878.</i> |
| P. | <i>Prisse d'Avennes, Hist. de l'Art égyptien, 1863.</i> |
| P.C. | <i>Perrot and Chipiez. Histoire de l'Art dans l'Antiquité.</i> |
| P.E.F. | <i>Quarterly Statement of the Palestine Exploration Fund.</i> |
| R.C. | <i>Rayet and Collignon, Hist. de la Céramique grecque.</i> |
| Schuchh. | <i>Schuchhardt, Schliemann's Excavations (Eng. Tr.).</i> |
| TsM. | <i>Tsountas and Manatt. The Mycenaean Age. 1897.</i> |
| W.V. | <i>Wiener Vorlegeblätter.</i> |

SLIDES RECENTLY ADDED TO SERIES CONTAINED IN PREVIOUS CATALOGUES.

Cc—NORTHERN GREECE :

Architecture, &c.

- 1574 Delphi : Athenian Stoa : [=Cc 1]
 1444 „ „ another view [=Cc 2]
 3551 „ Theatre : general view
 3552 „ „ upper seats
 3553 „ Stadion, looking E.
 3554 „ „ „ W.
 3555 „ „ „ W., showing starting point
 3577-8 „ „ two more views of starting point
 3556 „ „ supporting wall

Db—PELOPONNESE : *Views.*

- 3557 Corinth : Isthmian Canal, E. entrance looking W.
 3558 „ „ „ E. entrance
 3559 „ „ „ midway, looking W.
 3560 Epidaurus : distant view
 3575 „ Tholos, lion-head cornice
 3579 „ akroterion
 372 Lernaean Marsh : from an engraving (Wordsworth's *Greece*, p. 433)
 3562 Sphacteria : view of south entrance, from within, looking S.

- 3576 Sphacteria : cliff
 3565 Mycenae : postern gate, from within

[For other views of *Mycenae* and *Tiryns* see *Prehistoric Series* below.]

Eb—ISLANDS, &c. : *Views.*

- 720 Aegina : general view of Temple, from an engraving (Wordsworth's *Greece*, p. 190)
 1849 Ithaca : from Cephallenia : [=Eb 3]
 3566 „ the modern town (Vathy) from the sea
 3567 „ entrance to Vathy Bay
 3568 „ „ to Dexia Bay, from so-called 'Cave of the Nymphs'
 3569 „ Mount Aetos, from Pissaeto Bay, 'Castle of Odysseus,' with cyclopean walls on summit
 3570 „ Mount Aetos, E. slope, looking up to the *Kástro*
 3571 Tenos : harbour, Eve of the Annunciation Festival
 3572 „ procession of the Sacred Picture
 3573 „ Annunciation Festival ; keeping the line
 3574 „ Annunciation Festival ; the crowd

OLYMPIA.

[Incorporating all slides illustrating Olympia in previous lists.]

Maps and Plans.

- 2646 Map of Elis (*Olympia*, Mapped I.)
 2647 „ Olympia and neighbourhood (*Ol. Mapped II.*)
 32 „ „ after excavation, showing all periods together (Boetticher)
 2648 „ „ Hellenic period, Ca 300 B.C. (*Ol. Mapped III.*)
 2649 „ „ Roman period, Ca 200 A.D. (*Ol. Mapped IV.*)
 2650-1 Map of Olympia, Byzantine period (*Ol. Mapped V., A.E.*) in two slides

- 2652 Map of Heraion, Exedra, Metroon (*Ol. Mapped VI., E.*)
 2653 „ South Portico, Bouleuterion, Temple of Zeus (*Ol. Mapped VI., c*)
 2654 „ Echo Portico, Treasuries, Stadion (*Ol. Mapped VI., E*)

Views.

- 3901 General View : before excavation (from an engraving) : [=Db 10]
 2655 „ „ after excavation, from W. (Druva) (*Ol. Pl. 1*)

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| 999 | General View : after excavation, from W., showing Kladeos : [= Db 11] | 2659 | Treasuries : of Gela and Megara, looking S.W. (<i>Ol.</i> Pl. 5a) |
| 3501-3 | „ „ panorama (in three slides) : [Db 12-14] | 2664 | „ of Selinus and Metapontum (<i>Ol.</i> Pl. 7b) |
| 2704 | „ „ from S.E., Temple of Zeus in foreground (<i>Ol.</i> Pl. 2a) | 2681 | „ of Sikyon, with Metroon (<i>Ol.</i> Pl. 131) |
| 2676 | Section : diagonally through Heraion, Pelopion, Temple of Zeus (<i>Ol.</i> Pl. 125) | 2673 | „ restored corner of a Treasury, showing colouring (<i>Ol.</i> Pl. 112) |
| 2677 | „ diagonally through Leonidaion and Temple of Zeus (at right angles to preceding) (<i>Ol.</i> Pl. 126) | 2674 | „ various fragments of marble showing coloured ornamentation (<i>Ol.</i> Pl. 113) |
| 2678 | „ the same continued : Temple of Zeus, Echo Portico, S.E. Building and House of Nero (<i>Ol.</i> Pl. 127) | 2675 | „ painted terracotta façade (Tr. of Gela) : (<i>Ol.</i> Pl. 117) |
| 2679 | „ through the Treasuries, longitudinal and across (<i>Ol.</i> Pl. 128) | 2660 | South West Gate of Altiis : from N.E. (<i>Ol.</i> Pl. 5b) |
| 2665 | Temple of Zeus : ground plan (<i>Ol.</i> Pl. 9) | 1981 | Leonidaion : terracotta ornaments (<i>Ol.</i> Museum) |
| 2666 | „ „ (a) east front ; (b) cross section (<i>Ol.</i> Pl. 10) | 3509 | Palaestra : present state |
| 1975 | „ „ view from N.E. (near Heraion) : [= De 38] | 2670 | „ ground-plan |
| 3504 | „ „ view from N. (near Pelopion) | 2657 | „ and Theokoleion : general view (<i>Ol.</i> Pl. 4a) |
| 3505 | „ „ view from S.E. | 2682 | „ Philippeion, Gymnasion, Heraion, Prytaneion, restored (<i>Ol.</i> Pl. 131) |
| 1323 | „ „ restored : [= De 39] | 2671 | Philippeion : elevation (<i>Ol.</i> Pl. 80) |
| 2683 | „ „ „ (another rendering) (<i>Ol.</i> Pl. 132) | 2658 | Stadion : entrance from Altiis (<i>Ol.</i> Pl. 4b) |
| 2656 | „ „ interior, present state (<i>Ol.</i> Pl. 2b) | 3561 | „ „ „ Altiis (another view) |
| 1974 | Heraion : from S. : Kronos Hill behind : [= De 34] | 2669 | „ „ „ elevation : cross section ; and plan of goal-lines (<i>Ol.</i> Pl. 47) |
| 3506 | „ „ S. (another view) : [De 36] | 2086 | „ „ „ goal-lines at eastern end |
| 3507 | „ „ S.E. | 2662 | Nero's House (<i>Ol.</i> Pl. 6b) |
| 2085 | „ „ E., from near Treasury Terrace | 2663 | Byzantine Church : looking S. (<i>Ol.</i> Pl. 7a) |
| 3508 | „ „ N.W. : [= De 35] | 2661 | „ „ „ interior (<i>Ol.</i> Pl. 6a) |
| 1833 | „ „ W., from Gymnasion : [= De 37] | <i>Sculpture from Olympia.</i> | |
| 2667 | „ „ columnus, present state (<i>Ol.</i> Pl. 20) | | |
| 2668 | „ „ „ restored (<i>Ol.</i> Pl. 21) | 3682 | Hermes of Praxiteles : [= Sc. 15] |
| 2680 | Exedra and Heraion : restored (<i>Ol.</i> Pl. 129) | 376 | „ „ „ head only |
| 2672 | „ „ „ east front : elevation (<i>Ol.</i> Pl. 84) | 3680 | Nike of Paionios. |
| 1976 | Treasuries : retaining wall behind terrace | 3644 | Pedimental groups of the Temple of Zeus, restored : [= Sc. 5] |
| | | 1977 | „ E. Pediment separately : [= Sc. 6] |
| | | 3647 | „ E. Pediment : aged Seer [= Sc. 7] |
| | | 3646 | „ W. Pediment : central figure [= Sc. 8] |
| | | 1841 | „ W. Pediment : view in Museum [= Sc. 9] |

SCULPTURE.

Sb—Reliefs of Fine and Later Periods.

- 846 Athlete and ball (*B.C.H.* 1883, Pl. 19)
- 3579 Victory Akroterion · Epidaurus
- 3580 Votive relief to Asklepios (Fitzw. Mus.)

Sc—Statues, Busts, &c. of Fine and Later Periods.

- 3680 Nike of Paionios (Olympia)
- 3582 Athene (Munich)
- 3702 Niobe. Gardner, fig. 102

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|------|--|------|--|
| 3583 | Dionysus: 'Head of Christ' | 3588 | Kythera find. Hermes?; bronze (<i>id.</i> p. 208, fig. 3) |
| 3584 | Running girl, victorious. (Clarae. <i>Musée</i> , Pl. 864, 2199) | 3589 | " " Hermes?; bronze: legs (<i>id.</i> p. 207, fig. 4) |
| 3515 | Discolobus, standing (<i>B.D.I.</i> 503) | 3590 | " " Crouching youth: marble (<i>id.</i> p. 208, fig. 5) |
| 3586 | Kythera find. Youth: Bronze statuette (<i>J.H.S.</i> xxi. p. 205, fig. 1) | | |
| 3587 | " " Youth: Bronze statuette (<i>J.H.S.</i> xvi. p. 205, fig. 2) | | |

Va—VASES: *Geometrical and Orientalizing*: (classified under local styles).

[The series has been completely revised, but the slides contained in the previous lists may still be ordered under their former numbers, which are printed here in [square brackets].

For *Mycenaean* and earlier styles see Va 1-7 in the list of 1897, and the section on *Vases* in the new *Prehistoric* series, below].

| | | | |
|------|--|------|---|
| 2699 | Aegina: gryphon-headed oenochoe (<i>Brit.</i> R.C., fig. 28) | 2703 | Corinth: orientalizing: R.C., Pl. 5 |
| 308 | " Harpes, etc. <i>A.Z.</i> 1882, Pl. 10: [= Va 20] | 983 | " votive tablets, Pl. 6: [= Va 26] |
| 897 | " Herakles and Geryon, <i>J.H.S.</i> v. p. 176 [= Va 21] | 804 | Crete: geometrical: Anopolis, <i>Jahrb.</i> 1899, p. 37, fig. 17: [= Va 34] |
| 705 | Argolis: Tiryns: geometrical: man, horse, and fish. Schuchh. fig. 131: [= Va 8] | 806 | " geometrical: Anopolis, <i>Jahrb.</i> 1899, p. 41, figs. 26, 27: [= Va 36] |
| 811 | " Troezen: geometrical: <i>Jahrb.</i> 1899. p. 86, figs. 46, 47: [= Va 41] | 805 | " geometrical: Knossos, <i>Jahrb.</i> 1899, p. 39, fig. 21: [= Va 35] |
| 879 | Attica: Dipylon vase: <i>A.Z.</i> 1885, Pl. 8: [= Va 10] | 807 | " geometrical: Knossos, <i>Jahrb.</i> 1899, p. 42, figs. 29-31: [= Va 37] |
| 776 | " " choric dance, <i>Jahrb.</i> 1887, Pl. 3: [= Va 28] | 744 | Cyrene: Arkesilaos vase: sulphium-weighing, R.C. fig. 43 |
| 725 | " " funeral procession, B.D. 2071: [= Va 11] | 2535 | Cyprus: Graeco-Phoenician vase, Hellbig, <i>Epos</i> ² , fig. 20 |
| 885 | " Early Attic: Warriors, etc. B.D. 2079: [= Va 9] | 2736 | " Graeco-Phoenician, selected types |
| 2695 | " Early Attic: Siren, Couve. <i>B.C.H.</i> xxii. 283, fig. 4 | 2698 | Eretria: geometrical, Couve. <i>B.C.H.</i> , xxii. 279, fig. 2 |
| 819 | " Early Attic: Leaping. B.M.: [= Va 42] | 2694 | " orientalizing, Couve. <i>B.C.H.</i> , xxii. 281, fig. 3 |
| 3537 | " Early Attic?: Herakles and Nessos: Gorgons, <i>A.D.</i> 57 [= Va 23] | 810 | Laconia: geometrical, Amyklaion, <i>Jahrb.</i> 1899, p. 84, figs. 41, 42: [= Va 40] |
| 808 | Boeotia: geometrical, <i>Jahrb.</i> 1899, p. 81, figs. 35, 35a: [= Va 38] | 803 | Melos: geometrical, <i>Jahrb.</i> 1899, p. 34, figs. 11, 12: [= Va 33] |
| 809 | Boeotia: geometrical, (a) horse and duck, (b) lion, <i>Jahrb.</i> 1899, p. 82, fig. 37, 37a: [= Va 39] | 2701 | " orientalizing, boys on horses, R.C. Pl. 2 |
| 2696 | Boeotia: geometrical, the same: side (a) only: Couve. <i>B.C.H.</i> xxii. 274, fig. 1 | 601 | " " warriors in combat, B.D. 2086 [= Va 13] |
| 2702 | Boeotia: geometrical, relief ornament. Couve. <i>B.C.H.</i> xxii. Pl. 4 | 602 | " " Apollo and Artemis. R.C. p. 53: [= Va 15] |
| 2735 | Corinth: 'proto-Corinthian': Ashm. Mus. | 174 | " " bearded head, B.D. 240: [= Va 16] |
| 852 | " Macmillan lekythos, <i>J.H.S.</i> vi. Pl. 2: [= Va 27] | 877 | Naukratis: Polemarchos amphora, <i>Naukratis</i> i., Pl. 4: [= Va 19] |
| | | 3538 | " selected fragments, <i>Naukratis</i> i., Pl. 5: [= Va 22] |
| | | 2697 | Phanagoria: orientalizing: Hermitage: R.C. fig. 30 |

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|------|---|-----|---|
| 777 | Rhodes : plate : Gorgon, <i>J.H.S.</i> , vi, Pl. 59 : [= Va 29] | 143 | Uncertain : Aristonophos vase, <i>M.I.</i> , ix. 4 : [= Va 18] |
| 456 | „ „ Euphorbos, Menelaos, He- tor, B.M. : [= Va 29] | 454 | „ male head from archaic vase, Helbig, <i>Epos</i> ² , fig. 74 : [= Va 17] |
| 2700 | „ oenochoe, Louvre, R.C., fig. 29 | | |
| 801 | Thera : geometrical, <i>Jahrb.</i> 1899, p. 31. figs. 6, 7 : [= Va 31] | | |
| 802 | „ „ „ <i>Jahrb.</i> 1899, p. 32. figs. 8, 9 : [= Va 32] | | |
- [For objects of Early Iron Age, other than *Vases*, see 'Miscellaneous Series' (Ma) in this and previous lists.]

Vb—*VASES: black-figured.*

- | | | | |
|-----|---|------|---|
| 169 | Panathenaic amphorae : runners, R.C. fig. 60 | 782 | Funeral Procession (Gardner, <i>Sculptured Tombs</i> , fig. 4) : [= Vb 33a] |
| 847 | Runners (B.D. fig. 2359) | 1039 | François Vase : Apollo and Fountain |
| 778 | Death of Achilles (Birch, <i>Anc. Potter.</i> , 1873, p. 193) : [= Vb 56a] | 3591 | Chariot Race : hydria, Berlin, (Boetticher, <i>Olympia</i> , fig. 18) |

Vc—*VASES: red-figured.*

- 845 Athletes practising (
- G.A.V.*
- iv. 271.)

MISCELLANEOUS.

N.B.—The old series, Ma, Mb, have been reclassified and enlarged as follows ; but slides contained in them may still be ordered by their former numbers, which are given in [square brackets].

Ma—*PREHISTORIC GREECE.*

- | <i>Neolithic and Early Bronze Age in
general.</i> | <i>Hissarlik.</i> |
|--|--|
| 2727 Neolithic Implements from Greece and Asia Minor (Ashmolean) | 2567 Map of Troad (P.C. vi. fig. 61) : [cf. Ea 1, Ga 1, of former lists] |
| 2564 „ celt with magical inscription, P.C. vi. fig. 5 | 476 Panorama of Scamander Valley (Schlie- mann, 21 <i>A.B.</i>) : [=Gb2] |
| 2738 „ obsidian flakes : Melos | 3902 Tumulus : 'Tomb of Patroklos' |
| 2801 „ pottery from Knossos | 461 Hissarlik : ground plan |
| 2728 „ figurines from Knossos (and Cycladic figures for com- parison), <i>Mon.</i> 1901, 146 | 398 „ general view of Schliemann's excavations |
| 2729 Copper Implements from Cyprus (Ashm.) | 3904 „ 'Skaian Gates' : principal entrance of 'Second City' |
| 2726 „ „ „ „ (Cyprus) | 3905 „ watercourse outside town |
| 2725 Copper Implements from Central Europe for comparison (Much, <i>Kupferzeit</i> ² , fig. 1-14) | 458 „ pottery : selected types (B.D. 2003-23) : [= Va 1] |
| 2726 Copper Implements from Cyclades (Ashmolean) | 190 'Priam's Treasure,' from Second City [= Ma 80] |
| 2722-4 Bronze Age pottery from Cyprus (three slides) | 216 „ „ jewellery worn by Mme. Schliemann |
| 2730 Bronze Age tomb from Cyprus, with Mycenaean importations | 3906 „ ornaments. |
| | 3907 „ two handled gold cup |

Cyclades.

- 3596 Antiparos: bronze-age objj. (*B.S.A.* iii. p. 49)
 814 Syros: acropolis and cemetery of Chalandriani (*Eph.* 1899, Pl. 7)
 815 „ and Siphnos: pottery: selected types (*Eph.* 1899, Pl. 80)
 816 „ implements etc. (*Eph.* 1899, Pl. 10, 11)
 2570 Keros: marble figures (Athens Nat. Mus.: A.M. 1884, Pl. 6)
 2732 Amorgos: marble figures (Ashmolean)
 2733 „ „ bowls, &c. (Ashmolean)
 2223 Melos: obsidian *in situ*
 2738 „ obsidian flakes
 2226 „ Phylakopi from land side
 2227 „ „ S.W. angle
 2237 „ „ panorama of upper part of site
 2561 Thera: vases with naturalistic painting (P.C. vi. Pl. 20)

Crete (Views, etc.).

- 817 Knossos: General View from near Candia
 3828 „ Plan of the Palace, 1901
 3811 „ W. Court from S.W. Portico
 3812 „ Magazine with *pthoi*
 3813 „ „ large *pthos*
 3814 „ Throne-Room: Antechamber from N. entrance
 3815 „ Throne-Room from Antechamber
 3816 „ Throne-Room: the tank from N.W.
 844 „ Throne-Room in course of excavation

Mycenaean Art in General.

- 2705 Kamáris pottery (Mariani, *Mon. Ant.* vi. Pl. 9)
 2734 „ „ Knossos (*J.H.S.* xxi. Pl. 6, 7)
 463 Vases: selected types (B.D. 2062 ff.): [=Va 2]
 891 „ from Karpathos and Kalymnos (*J.H.S.* viii. Pl. 83): [=Va 4]
 497 „ ‘bugelkanne’ type: [=Va 3]
 2559 „ floral ornament, somewhat conventionalised, from Shaft-grave (P.C. vi. Pl. 21)
 2558 „ marine subject (P.C. vi. fig. 436)
 3511 „ octopus (Marseilles Mus.)
 489 „ later style: ‘Warrior Vase’ from Mycenae: obv. (Schuchh. fig. 284): [=Va 5]
 713 „ later date: ‘Warrior Vase’ rev. (*id.* fig. 285): [=Va 6]

Vases: later date: warrior, horse, and dog: Tiryns

- 2536 „ sub-Mycenaean: Lapathos in Cyprus (*K.B.H.* xcvi. 1)
 2711 „ „ Tell-es-Safi in Philistia (*P.E.F.* 1899. 324)
 343 Fresco-painting: bull-catching: Tiryns: [=Ma 1]
 831 „ „ façade of temple; Knossos (*J.H.S.* xxi. Pl. 5)
 832 „ „ façade of temple: Knossos (restored *id.* p. 193)
 3802 „ „ cupbearer: Knossos (*Monthly Review*, March 1901, p. 124, fig. 6)
 3803 „ „ girl: Knossos (*B.S.A.* vii. fig. 17)
 3512 „ „ asses: Mykenae (*J.H.S.* xiv. p. 81)
 3513 „ „ reconstruction of ceiling: spirals (*J.H.S.* xiv. Pl. 12)
 2710 Gems: selected (B.M. *Cat. of Gems*, Pl. 1)
 2571 „ „ (P.C. vi. Pl. 16)
 839 „ „ (*Eph.* 1888, Pl. 10 = T.M. p. 218)
 3851-7 „ „ (from casts: seven slides)
 3860-70 „ „ (other groups: eleven slides)
 3514 „ demons (Milchhofer, *Anf. J. K.* figs. 44, 46)
 833 „ male deity and lions (*J.H.S.* xxi. p. 163)
 3515 „ animal figures (*J.H.S.* xiv. 106-153)
 3510 Cretan seal-stones (Evans, *J.H.S.* xvi. p. 327): [=Ma 41]
 3818 „ seal-stones, prismatic, with pictographic signs
 3807 Script: clay tablets: linear (833. 59) (*B.S.A.* vi. Pl. 1)
 2585 Sculpture and Modelling: statuette, Kampos (Tsountas, *Μυκ. Πόλ.* Pl. 11)
 3804 „ human figure in relief: Knossos (*B.S.A.* vii. fig. 6)
 3806 „ head of bull: Knossos (*Monthly Rev.* 1901. 126, fig. 7)
 344 „ stele from ‘Shaft-grave’: spirals, chariot and armed man (Schuchh. fig. 146): [=Ma 47]
 3516 „ disc of Sarobina (Berlin) from photo. [=Ma 30]
 346 Gold mask from ‘Shaft-graves’ (Schl. *Myc.* fig. 474): [=Ma 4]
 345 „ diadems (Schuchh. fig. 153): [=Ma 36]
 3517 „ „ half only (Schuchh. fig. 149): [=Ma 37]

- 3518 Gold breastplate: spirals (Schuchh. fig. 256): [=Ma 38]
 347b „ disc: octopod ornament (Schuchh. fig. 190): [=Ma 45]
 3519 „ „ spirals (Schuchh. fig. 191): [=Ma 35]
 347a „ „ wavy band (Schuchh. fig. 189): [=Ma 34]
 2562 „ „ leaf, butterfly, octopus, spiral (P.C. vi. fig. 540)
 200 „ ring: group of females (Schl. *Myc.* fig. 550): [=Ma 2]
 883 „ „ (a) fighting, (b) hunting (Schl. *Myc.* fig. 334, 335): [=Ma 3]
 3520 „ cup: rosettes (Schl. *Myc.* fig. 344): [=Ma 31]
 3521 „ „ fluted ornament (Schl. *Myc.* fig. 342): [=Ma 32]
 496 „ „ doves on handles (Schuchh. fig. 240): [=Ma 5]
 1079 „ cow's head (Schl. *Myc.* fig. 327): [=Ma 48]
 3912 „ shrine and goddess (Schl. *Myc.* fig. 423)
 3913 „ other articles
 481 Inlaid daggers: lion-hunt [Schuchh. fig. 227]: [=Ma 6]
 699a „ „ cats and water-birds: obv. (*A.M.* vii. 8): [=Ma 28]
 699b „ „ cats and water birds: rev. (*A.M.* vii. 8): [=Ma 29]
 77 „ „ (a) cats (inlaid), (b) horses (not inlaid): [=Ma 7]
 335 'Aegina Treasure': gold cup with spirals (*J.H.S.* xiii. p. 196): [=Ma 12]
 336 „ gold pendant (*J.H.S.* xiii. p. 197): [=Ma 13]
 337 „ „ „ (*J.H.S.* xiii. p. 201): [=Ma 14]
 2719 Enkomi: greaves, with vase fragment for comparison (Reichel, *Hom. Waffen*,² fig. 30, 31)
 3522 „ draughtboard (*J.H.S.* xvi. p. 289, 290)
 3805 Knossos: draughtboard (*B.S.A.* vii. fig. 25)
 830 „ gold signet, engraved (*J.H.S.* xxi. p. 170)
 3523 Mycenae: fibulae, etc. from tombs in lower town
 2706 „ fibulae (Tsountas, *Μυκ. Πολ.* Pl. 7)
 2707 „ swords (Tsountas, *Μυκ. Πολ.* Pl. 7)
 2708 „ spearhead, knife, axe (*Μυκ. Πολ.* Pl. 7)
 876 „ silver bowl, siege scene (*Eph.* 1891, Pl. 2, fig. 2): [=Ma 8]
 1042 Orchomenos: ceiling (Collignon, fig. 19): [=Ma 43]
 2720 Spata: ivory heads with helmets (Reichel, *Hom. W.*,² fig. 38, 39)
 235 Tiryns: frieze of glass-paste and alabaster (Collignon, fig. 26): [=Ma 44]
 457 Vaphio: gold cups, and scenes drawn out (*Eph.* 1899, Pl. 9): [=Ma 9]
 455 „ axe-head (*Μυκ. Πολ.* Pl. 7): [=Ma 20]

Egyptian Contact with Aegean Civilisation.

- 3524 Nubian pots with spirals (photo): [=Ma 39]
 3525 „ „ boat (photo): [=Ma 40]
 2730 Aegean vases (Kamaraïs type) from Kalun (*J.H.S.* xi. Pl. 14)
 3510 Cretan seal-stones and Egyptian scarabs (*J.H.S.* xiv. 327): [=Ma 41]
 3526 Cartouche of King Khyan, from Knossos (*B.S.A.* vii. fig. 21)
 2731 Egyptian statuette from Palace of Knossos (*Eg. Expl. Fund. Report*, '1899—1900, p. 60 ff.)
 834 Egyptian lions and solar disc, cf. Cretan seal-stones (*J.H.S.* xxi. p. 162)
 1010 Gryphons, Egyptian (Aah-hotep) and Mycenaean (Schuchh. fig. 186): [=Ma 22]
 1006 Fresco-subjects, Egyptian: cats (*B.M.* No. 170): [=Ma 27]
 3527 „ Egyptian: bull (Petrie, *Tell-el-Amarna*, Pl. 3): [=Ma 18]
 1004 Fresco-subjects, Egyptian: bull and lion (unpublished): [=Ma 20]
 3528 „ Egyptian: calf (Petrie, *Tell-el-Amarna*, Pl. 4): [=Ma 19]
 1008 „ Egyptian: canal scene (unpublished): [=Ma 21]
 3529 Spiral ornament on columns (Petrie, *Tell-el-Amarna*, Pl. 10): [=Ma 17]
 3530 „ Nefer-hotep ceiling (P. 81): [=Ma 23]
 3531 „ (P. 83): [=Ma 24]
 3532 „ and lotus (P. 85): [=Ma 25]
 3533 „ „ „ (P. 86): [=Ma 26]
 2709 Kefti vases: from Rekhinara tomb
 3534 „ „ single example (P. 100): [=Ma 33]

Mycenaean Architecture: House Plans, etc.

| | | | |
|------|---|------|--|
| 818 | Gha : fortress-plan (T ^s M. p. 376) : [=Ca 4] | 867 | Tiryns : megaron restored : [=Dc 26] |
| 2569 | Hissarlik : house-plan (P.C. vi. fig. 48) | 894 | Capital from 'Treasury of Atreus' restored (Puchstein, <i>Das. Ton. Cap.</i> fig. 42) : [=Dc 15] |
| 3828 | Knossos : palace-plan 1901-2 (<i>B.S.A.</i> vii. frontispiece) | 1335 | „ Mycenaean and Doric profiles compared (<i>J.H.S.</i> vii. p. 163) : [=Dc 16] |
| 2565 | Mycenae : houses near the 'circle' (P.C. vi. fig. 114) | 1816 | Bridge (cyclopean) near Epidaurus : [=Dc 33] |
| 2566 | Thera : house-plan (P.C. vi. fig. 30) | | |
| 2568 | Therasia : „ (P.C. vi. fig. 29) | | |
| 2715 | Tiryns and Mycenae : palaces compared (<i>J.H.S.</i> xx. p. 131) | | |

Mycenaean Sites: Views, etc.

| | | | |
|------|---|------|---|
| 2047 | Athens : 'Pelagic Wall' on Acropolis | 1684 | Mycenae : 'Mme. Schliemann's Treasury,' dromos and doorway : [=Dc 17] |
| 178 | Mycenae : ground plan (Schuchhardt) : [=Da 1] | 1431 | „ 'Mme. Schliemann's Treasury,' view of lintel from above : [=Dc 54] |
| 2061 | „ general view from 'Treasury of Atreus' : [=Db 50] | 247 | Tiryns : ground-plan (Schliemann) : [=Dc 2] |
| 3428 | „ wall and tower below Lion Gate : [=Dc 3] | 462 | „ „ „ upper citadel only |
| 848 | „ Lion Gate, general view : [=Dc 4] | 2715 | „ „ „ compared with Mykenai (<i>J.H.S.</i> xx p. 181) |
| 2064 | „ „ „ nearer view | 400 | „ „ „ megaron only (Schuchhardt) : [=Da 3] |
| 2065 | „ „ „ from within | 878 | „ general view from West : [=Dc 18] |
| 1959 | „ Postern : [=Dc 6] | 1676 | „ „ „ from Outer Gate on E. side : [=Dc 19] |
| 3565 | „ „ from within | 3430 | „ „ „ from N. flanking Tower from within : [=Dc 20] |
| 1683 | „ Gallery leading to Well in N. Wall : [=Dc 7] | 1960 | „ „ „ Ramp to Entrance : [=Dc 21] |
| 3535 | „ Palace, Walls : [=Dc 10] | 864 | „ North Wall and Postern : [=Dc 23] |
| 3429 | „ „ staircase : [=Dc 11] | 3433 | „ „ „ Upper Citadel seen from the North |
| 3450 | „ „ megaron and hearth | 3449 | „ West wall of Upper Citadel |
| 2067 | „ Circle and Shaft-graves : [Dc 8] | 3432 | „ „ „ and Sally port : [=Dc 22] |
| 2068 | „ „ and Shaft-graves, nearer view : [=Dc 9] | 1679 | „ South Wall, Gallery : [=Dc 24] another view, 3564 |
| 488 | „ „ during excavation (Schl. <i>Myc.</i> Pl. 7) | 3431 | „ East Wall, Gallery : [=Dc 25] another view, 3563 |
| 487 | „ 'Treasury of Atreus,' façade, before excavation | 3903 | „ „ „ Gallery, section |
| 2060 | „ 'Treasury of Atreus,' façade, after excavation : [=Dc 13] | 3536 | „ Masonry, detail, from inside. |
| 2563 | „ 'Treasury of Atreus,' façade, restored (P.C. vi. Pl. 6) | | |
| 3908 | „ 'Treasury of Atreus,' ground plan | | |
| 3909 | „ 'Treasury of Atreus,' longitudinal section | | |
| 1681 | „ 'Treasury of Atreus,' interior, present state : [=Dc 14] | | |
| 2560 | „ 'Treasury of Atreus,' restored : (P.C. vi. Pl. 7) | | |

Ma—EARLY IRON AGE: Geometrical and Orientalizing Art-styles.

[For Vases of these styles see the Series Va above.]

| | | | |
|------|---|------|---|
| 1025 | Boeotia: gold band: lotos ornament. <i>Eph.</i> 1892, Pl. 12: [=Ma 46] | 341 | 'Phoenician Bowl': Praeneste, Egyptian subjects: <i>M.A.I.</i> x. Pl. 32, fig. 1: [=Ma 52] |
| 2531 | Cyprus: iron sword from Tamassos <i>K.B.H.</i> cxxxvii. 7 | 493 | Olympia. Bronze cuirass (engraved figures only), Helbig, <i>Epos</i> ² , fig. 48: [=Ma 70] |
| 2533 | „ Cypro-Mycenaean vase handle: demons and vases. <i>K.B.H.</i> clvii. 4 | 35 | „ „ Priam redeeming Hector, <i>Aufs. E. Curtius gew.</i> Pl. 4: [=Ma 71] |
| 2537 | „ Graeco-Phoenician shield boss from Amathus. <i>K.B.H.</i> cxlii. 5 | 3602 | „ „ Herakles and Triton. Gardner, figs. 2-3: [=Ma 54] |
| | „ [for 'Phoenician bowl' series, see below, <i>s.c.</i>] | 3592 | „ „ Boetticher, <i>Olympia</i> . p. 185 [=Mb 17] |
| 812 | Egypt: bronze bowl (xviii. dyn.), <i>Jahrb.</i> 1898, Pl. 2: [=Ma 55] | 2674 | „ „ painted marble fragments (<i>Ol.</i> Pl. 113) |
| 813 | 'Phoenician Bowl': Cyprus, Egyptian subjects. <i>Jahrb.</i> 1898, figs. 7, 7a: [=Ma 56] | 2675 | „ „ terracotta: Treasury of Gela (<i>Ol.</i> Pl. 117) |
| 3539 | „ „ Cyprus: mixed style. P.C. iii. 546: [=Ma 42] | 3605 | „ „ 'Chest of Kypselos': diagram. Gardner, fig. 5: [=Mb 38] |
| 340 | „ „ Cyprus: gryphons and lions. Clermont Gan- neau, <i>L'Inay. Phén.</i> Pl. 4: [=Ma 50] | 3541 | „ „ 'Chest of Kypselos' restored. <i>J.H.S.</i> xiv. Pl. 1. |
| 706 | „ „ Cyprus: siege scene. Helbig, <i>Epos</i> ² , Pl. 1: [=Ma 49] | | |

Armour and Warfare.

[For Mycenaean Armour see the 'Prehistoric' Series above. For Hellenic Armour compare also Battle-scenes on Vases in series Vb, Vc: esp. in the 'Trojan Cycle.']

| | | | |
|------|---|------|--|
| 176 | 'Bow of Odysseus' vase | 2719 | Greaves: early example from Cyprus (Eukomi). Reichel, <i>Hom.</i> <i>Waffen</i> ² , figs. 30, 31. |
| 338 | 'Homeric Warrior' (Leaf and Bayfield): side view: [=Ma 15] | 3540 | Hoplite armour: painted tablet: Acro- polis: [=Ma 73] |
| 339 | 'Homeric Warrior' (Leaf and Bayfield): front view: [=Ma 16] | 471 | „ „ bronze statuettes, B.D. 2190-1: [=Ma 72] |
| 2717 | 'Boeotian shield': early types. Reichel, <i>Hom. Waffen</i> ² , figs. 13, 14, 15 | 701 | „ „ Melian vase: [=Va 13] |
| 2718 | „ „ and other early shields (vase): <i>id.</i> fig. 25 | 234 | „ „ youths arming (vf, vase). B.D. 2207 [=Va 87] |
| 470 | 'Shield of Achilles' (Murray): [=Ma 53] | 3911 | Armed Footrace. B.D. 2360 |
| 3604 | „ „ (Gardner, fig. 4): [=Mb 37] | 3910 | Dokimasia of Cavalry, B.A. xl. 7 |
| 2716 | Greaves: hoplite putting them on: (vase): Reichel, <i>Hom. Waffen</i> ² , fig. 32 | 572 | Pyrhic Dance (relief) |

Coins.

- | | | | |
|-------------------|---|------|--|
| 3607 | Aenos, .R: showing primitive statue. Gardner, fig. 7: | 3595 | Elcuisis, .E, Triptolemos in snake-chariot. <i>J.H.S.</i> Pl. 77, EE xx. : [=Mb 19] |
| 3543 ^a | Achaea: [=Mb 43] | 3654 | Elis, .R, Olympian Zeus, Gardner, fig. 54: [=Mb 5] |
| 3543 ^b | Arcadia: [=Mb 43] | 3655 | ,, .R, Olympian Zeus, Gardner fig. 55: [=Mb 6] |
| 967 | Athens, .R, 5th cent.: head of Athene: [=Mb 15] | 3546 | Cnidus, etc. |
| 856 | ,, .E, contest of Athene and Poseidon. <i>J.H.S.</i> Pl. 75, Z xiv.: [=Mb 16] | 3542 | Lampsacus: [=Mb 42] |
| 3592 | ,, .E, Athene with shield and thunderbolt. <i>J.H.S.</i> Pl. 75, AA xiv.: [=Mb 17] | 3546 | Lydae, etc.: [=Mb 46] |
| 3626 | ,, .E, statue of Apollo of Delos. Gardner, fig. 26 | 1074 | Macedon, Philip II. A. stater. Head of Apollo: [=Mb 18] |
| 855 | Corinth, .E, Aphrodite with shield, and Eros. <i>J.H.S.</i> Pl. 53, G cxxi.: [=Mb 20] | 3544 | ,, Philip III. (Gaulish imitation): [=Mb 44] |
| 3593 | ,, .E, Aphrodite in temple. <i>J.H.S.</i> Pl. 53, G cxxvi.: [=Mb 21] | 3548 | Myra (goddess of): Gordian: Claudius: [=Mb 48] |
| 3594 | Cyprus, .E, Temple of Aphrodite at Paphos (several examples): Roman: [=Mb 23] | 342 | Rome, .E: arrival of Aesculapius at Insula Tiberina: [=Mb 22] |
| 3549 | Egypt, .E, Ptolemy I.: Alexander III.-IV. (together): [=Mb 49] | 3606 | Sparta, .E: statue of Apollo. Gardner, fig. 6: [=Ma 78] |
| | | 3547 | Tarentum, Alexander of Epirus: [=Mb 47] |
| | | 3545 | Tarsus: Demetrius II.: the God Sandan, etc.: [=Mb 45] |

[Compare the large series of slides of Coins in *Hellenic Association Series*
(*J.H.S.* xx. lxiii.).]

A LIST OF PHOTOGRAPHS OF HELLENIC SITES.

CLASSIFIED IN GEOGRAPHICAL ORDER, AND SO FAR AS POSSIBLE
FROM EAST TO WEST.

THE following list of photographs represents one sub-section of the reference-collection which is preserved in the Hellenic Society's Library. The columns of asterisks show the approximate size of the photograph which is included in the collection: thus, an asterisk in the column headed—

| | |
|---------------|--|
| $\frac{1}{4}$ | signifies a photograph of quarter-plate size or less (3' x 3'. &c.). |
| $\frac{1}{2}$ | half-plate (5' x 4'). |
| $\frac{1}{1}$ | whole plate (7' x 5'). |
| 2 | more than whole plate size (usually 8' x 10'). |

In the large majority of cases, members may procure copies of these photographs by ordering from the Assistant Librarian: in such cases the full title of the photograph must be quoted, together with the size required.

It should be noted that where two or more sizes are shown, they are usually from different negatives, and the point of view from which the photographs were taken is not necessarily identical in all cases.

| ASIA MINOR. | | ASPENDUS. | |
|-------------|--|-----------|--|
| | ADANA. | | |
| | View from the inn | * | Theatre (=Texier Pl. 33) |
| | AFIUM KARA HISSAR. | | |
| * | Town and citadel | * | General view: theatre in middle distance |
| | AMASIA. | * | Theatre: nearer |
| | | * | Temple ruins |
| * | General view, with tombs of Pontic Kings | * | Bridge over Iris |
| * | Citadel: from Turkhal road | * | Mound |
| | | * | Ruined Buildings |

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1. *Staphylococcus aureus* (ATCC 29213)

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| Year | Number of cases | Percentage of cases |
|------|-----------------|---------------------|
| 1990 | 10 | 10.0 |
| 1991 | 15 | 15.0 |
| 1992 | 20 | 20.0 |
| 1993 | 25 | 25.0 |
| 1994 | 30 | 30.0 |
| 1995 | 35 | 35.0 |
| 1996 | 40 | 40.0 |
| 1997 | 45 | 45.0 |
| 1998 | 50 | 50.0 |
| 1999 | 55 | 55.0 |
| 2000 | 60 | 60.0 |
| 2001 | 65 | 65.0 |
| 2002 | 70 | 70.0 |
| 2003 | 75 | 75.0 |
| 2004 | 80 | 80.0 |
| 2005 | 85 | 85.0 |
| 2006 | 90 | 90.0 |
| 2007 | 95 | 95.0 |
| 2008 | 100 | 100.0 |
| 2009 | 105 | 105.0 |
| 2010 | 110 | 110.0 |
| 2011 | 115 | 115.0 |
| 2012 | 120 | 120.0 |
| 2013 | 125 | 125.0 |
| 2014 | 130 | 130.0 |
| 2015 | 135 | 135.0 |
| 2016 | 140 | 140.0 |
| 2017 | 145 | 145.0 |
| 2018 | 150 | 150.0 |
| 2019 | 155 | 155.0 |
| 2020 | 160 | 160.0 |
| 2021 | 165 | 165.0 |
| 2022 | 170 | 170.0 |
| 2023 | 175 | 175.0 |
| 2024 | 180 | 180.0 |
| 2025 | 185 | 185.0 |
| 2026 | 190 | 190.0 |
| 2027 | 195 | 195.0 |
| 2028 | 200 | 200.0 |
| 2029 | 205 | 205.0 |
| 2030 | 210 | 210.0 |
| 2031 | 215 | 215.0 |
| 2032 | 220 | 220.0 |
| 2033 | 225 | 225.0 |
| 2034 | 230 | 230.0 |
| 2035 | 235 | 235.0 |
| 2036 | 240 | 240.0 |
| 2037 | 245 | 245.0 |
| 2038 | 250 | 250.0 |
| 2039 | 255 | 255.0 |
| 2040 | 260 | 260.0 |
| 2041 | 265 | 265.0 |
| 2042 | 270 | 270.0 |
| 2043 | 275 | 275.0 |
| 2044 | 280 | 280.0 |
| 2045 | 285 | 285.0 |
| 2046 | 290 | 290.0 |
| 2047 | 295 | 295.0 |
| 2048 | 300 | 300.0 |
| 2049 | 305 | 305.0 |
| 2050 | 310 | 310.0 |
| 2051 | 315 | 315.0 |
| 2052 | 320 | 320.0 |
| 2053 | 325 | 325.0 |
| 2054 | 330 | 330.0 |
| 2055 | 335 | 335.0 |
| 2056 | 340 | 340.0 |
| 2057 | 345 | 345.0 |
| 2058 | 350 | 350.0 |
| 2059 | 355 | 355.0 |
| 2060 | 360 | 360.0 |
| 2061 | 365 | 365.0 |
| 2062 | 370 | 370.0 |
| 2063 | 375 | 375.0 |
| 2064 | 380 | 380.0 |
| 2065 | 385 | 385.0 |
| 2066 | 390 | 390.0 |
| 2067 | 395 | 395.0 |
| 2068 | 400 | 400.0 |
| 2069 | 405 | 405.0 |
| 2070 | 410 | 410.0 |
| 2071 | 415 | 415.0 |
| 2072 | 420 | 420.0 |
| 2073 | 425 | 425.0 |
| 2074 | 430 | 430.0 |
| 2075 | 435 | 435.0 |
| 2076 | 440 | 440.0 |
| 2077 | 445 | 445.0 |
| 2078 | 450 | 450.0 |
| 2079 | 455 | 455.0 |
| 2080 | 460 | 460.0 |
| 2081 | 465 | 465.0 |
| 2082 | 470 | 470.0 |
| 2083 | 475 | 475.0 |
| 2084 | 480 | 480.0 |
| 2085 | 485 | 485.0 |
| 2086 | 490 | 490.0 |
| 2087 | 495 | 495.0 |
| 2088 | 500 | 500.0 |
| 2089 | 505 | 505.0 |
| 2090 | 510 | 510.0 |
| 2091 | 515 | 515.0 |
| 2092 | 520 | 520.0 |
| 2093 | 525 | 525.0 |
| 2094 | 530 | 530.0 |
| 2095 | 535 | 535.0 |
| 2096 | 540 | 540.0 |
| 2097 | 545 | 545.0 |
| 2098 | 550 | 550.0 |
| 2099 | 555 | 555.0 |
| 2100 | | |

| Year | Number of cases | Percentage of cases |
|------|-----------------|---------------------|
| 1990 | 10 | 10.0 |
| 1991 | 15 | 15.0 |
| 1992 | 20 | 20.0 |
| 1993 | 25 | 25.0 |
| 1994 | 30 | 30.0 |
| 1995 | 35 | 35.0 |
| 1996 | 40 | 40.0 |
| 1997 | 45 | 45.0 |
| 1998 | 50 | 50.0 |
| 1999 | 55 | 55.0 |
| 2000 | 60 | 60.0 |
| 2001 | 65 | 65.0 |
| 2002 | 70 | 70.0 |
| 2003 | 75 | 75.0 |
| 2004 | 80 | 80.0 |
| 2005 | 85 | 85.0 |
| 2006 | 90 | 90.0 |
| 2007 | 95 | 95.0 |
| 2008 | 100 | 100.0 |
| 2009 | 105 | 105.0 |
| 2010 | 110 | 110.0 |
| 2011 | 115 | 115.0 |
| 2012 | 120 | 120.0 |
| 2013 | 125 | 125.0 |
| 2014 | 130 | 130.0 |
| 2015 | 135 | 135.0 |
| 2016 | 140 | 140.0 |
| 2017 | 145 | 145.0 |
| 2018 | 150 | 150.0 |
| 2019 | 155 | 155.0 |
| 2020 | 160 | 160.0 |
| 2021 | 165 | 165.0 |
| 2022 | 170 | 170.0 |
| 2023 | 175 | 175.0 |
| 2024 | 180 | 180.0 |
| 2025 | 185 | 185.0 |
| 2026 | 190 | 190.0 |
| 2027 | 195 | 195.0 |
| 2028 | 200 | 200.0 |
| 2029 | 205 | 205.0 |
| 2030 | 210 | 210.0 |
| 2031 | 215 | 215.0 |
| 2032 | 220 | 220.0 |
| 2033 | 225 | 225.0 |
| 2034 | 230 | 230.0 |
| 2035 | 235 | 235.0 |
| 2036 | 240 | 240.0 |
| 2037 | 245 | 245.0 |
| 2038 | 250 | 250.0 |
| 2039 | 255 | 255.0 |
| 2040 | 260 | 260.0 |
| 2041 | 265 | 265.0 |
| 2042 | 270 | 270.0 |
| 2043 | 275 | 275.0 |
| 2044 | 280 | 280.0 |
| 2045 | 285 | 285.0 |
| 2046 | 290 | 290.0 |
| 2047 | 295 | 295.0 |
| 2048 | 300 | 300.0 |
| 2049 | 305 | 305.0 |
| 2050 | 310 | 310.0 |
| 2051 | 315 | 315.0 |
| 2052 | 320 | 320.0 |
| 2053 | 325 | 325.0 |
| 2054 | 330 | 330.0 |
| 2055 | 335 | 335.0 |
| 2056 | 340 | 340.0 |
| 2057 | 345 | 345.0 |
| 2058 | 350 | 350.0 |
| 2059 | 355 | 355.0 |
| 2060 | 360 | 360.0 |
| 2061 | 365 | 365.0 |
| 2062 | 370 | 370.0 |
| 2063 | 375 | 375.0 |
| 2064 | 380 | 380.0 |
| 2065 | 385 | 385.0 |
| 2066 | 390 | 390.0 |
| 2067 | 395 | 395.0 |
| 2068 | 400 | 400.0 |
| 2069 | 405 | 405.0 |
| 2070 | 410 | 410.0 |
| 2071 | 415 | 415.0 |
| 2072 | 420 | 420.0 |
| 2073 | 425 | 425.0 |
| 2074 | 430 | 430.0 |
| 2075 | 435 | 435.0 |
| 2076 | 440 | 440.0 |
| 2077 | 445 | 445.0 |
| 2078 | 450 | 450.0 |
| 2079 | 455 | 455.0 |
| 2080 | 460 | 460.0 |
| 2081 | 465 | 465.0 |
| 2082 | 470 | 470.0 |
| 2083 | 475 | 475.0 |
| 2084 | 480 | 480.0 |
| 2085 | 485 | 485.0 |
| 2086 | 490 | 490.0 |
| 2087 | 495 | 495.0 |
| 2088 | 500 | 500.0 |
| 2089 | 505 | 505.0 |
| 2090 | 510 | 510.0 |
| 2091 | 515 | 515.0 |
| 2092 | 520 | 520.0 |
| 2093 | 525 | 525.0 |
| 2094 | 530 | 530.0 |
| 2095 | 535 | 535.0 |
| 2096 | 540 | 540.0 |
| 2097 | 545 | 545.0 |
| 2098 | 550 | 550.0 |
| 2099 | 555 | 555.0 |
| 2100 | | |

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[illegible]

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|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

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| Year | Number of cases | Age-adjusted rate |
|------|-----------------|-------------------|
| 1990 | 1,000 | 10.0 |
| 1991 | 1,100 | 11.0 |
| 1992 | 1,200 | 12.0 |
| 1993 | 1,300 | 13.0 |
| 1994 | 1,400 | 14.0 |
| 1995 | 1,500 | 15.0 |
| 1996 | 1,600 | 16.0 |
| 1997 | 1,700 | 17.0 |
| 1998 | 1,800 | 18.0 |
| 1999 | 1,900 | 19.0 |
| 2000 | 2,000 | 20.0 |

PHILADELPHIA.

View from road, looking W.
 " top of hill
 Walls, looking E. (2 views)
 Christian Church, now a mosque

PHRYGIA (General).

AYAZEN.

Lion Tomb
 Tombs 1, 2, and 3 together
 " 1, 2, 3, and 6 separately

MIDAS NEÜROPOLIS.

Tomb of Midas
 " with acanthus pattern
 Rock altar
 Fallen Lion Tomb
 " head of lion
 Stone cut like a ram

SARDIS.

General view of plain, looking E.
 Temple of Cybele
 Christian Church: ruins
 Stadium, Theatre, and Church

SIS (Pontus)

View in valley towards Sis
 " away from Sis
 Armenian monastery

SIVAS.

Gate of Seljuk College

SMYRNA.

General view from Bouja road
 Harbour and railway pier
 Caravan Bridge: entrance to town
 Village of Bouja
 " Protestant Church
 St. Anne's Valley: River Meles
 " Church of St. Elias
 " aqueduct
 Aqueduct: other side, from 'Great
 Paradise'
 Old Khan

TAURUS Range.

View from Sis up the valley
 " ten miles W. of Yarpuz (*Arabissus*)
 " from Kanla Kawak: along the
 great eastward road
 Gorge above Zeitun
 Kussuk Pass: view from summit down
 the Pyramus valley
 " view up stream north-
 wards

THYATIRA.

General view from Windmill Hill

TOKAT.

General view
 " with castle

TRALLIS.

Gymnasium

TURKHAL.

Gaz-Ibora: general view
 Iris river

CYPRUS.

Amorgotti: view from village
Aschlar: carved wooden church screen
 " Baldachin
 " pulpit
 " food, etc.
 " gorge near Aschelia
Bellapais: the cloister
Dou d'Amour: Castle
Episkopi: (Kition) from W.
 " Akropolis and site of excavations,
 1895

" workmen and staff, 1895 (2 views)
Famagusta: General view. Cathedral
 and Church of St. George

" Rampart and moat
 " Cathedral from rampart
 " " " W. front
 " " " " minaret
 " " " " E. end
 " " " " S. side
 " " " " chantry door
 " Lusignan palace: gateway

Kermea: Byzantine Fort

Kolossi: Castle of Knights Templars

Kouklia: Village

" The village mosque
 " Threshing floor
 " Koukhote diggers
 " Valley W. of village
 " " N.E. of village, and village
 of Suskiu

Lapathos: tomb and monastery

Leonidari *Tortad*: Crusaders' Fortress
 from S.

St. Nicholas, *Cavo Gatta*, *Limnosol*.
 Church

Nicosia: St. Sophia, W. end

" " interior

" Desecrated Church

" Street scene

Paphos (*Kouklia*): Monoliths by the sea
 " Temple, S. Wing, S.W. angle
 blocks

" " " another view

" " " from S. Porch

" " " excavation

" " " Central Court: Breakfast

" " " S. Porch: excavations

" " " W. end

" " " S.E. angle

" " " from S.E. angle

" " " N. wall: W. end

" " " N.W. angle block (Cesnola's)

" " " S. chamber from E.

Paphos (Konklia) E entrance
 „ Inscribed pedestal
 „ General view from excavators' house: E part
 „ Inscription (elaeochristian)
 „ Eros, from Temple of Aphrodite
 „ „ profile view
 „ Terra-cott head
New Paphos 'The Bleeding Column'
Parapedhna
Troodos: summit, and summer encampment

GREEK ISLANDS.

EGINA.

General view
 Temple of Athene: distant view
 „ „ from E.
 „ „ „ S.E.
 „ „ „ S.E.: from below
 „ „ „ S.W.
 „ „ „ W.
 „ „ „ N.E.
 „ „ interior looking N.E.
 „ „ „ W.

AMORGOS.

Minoan: primitive acropolis wall
 „ heroon on acropolis
 Hellenic watch tower
 „ farmstead
 „ oil-press block

CRETE.

See separate list hereafter

DELOS.

Precinct of Isis
 Cynthian Mount
 „ „ from Lake of Leto
 „ „ Temple of Apollo
 „ „ Cave Temple: Roman house in foreground
 „ „ „ „ foundations
 „ „ „ „ statue of Isis
 Lake of Leto
 Temple of Apollo: ruins
 Temple of Apollo: akroterion [*Athens Nat. Mus.*]
 „ „ akroterion [*Athens N.M.*]
 Theatre
 „ „ priest's seat
 Baths
 Naxian colossal statue
 Archaic female statue from Delos [*Athens N.M.*]
 Portrait statue of C. Ofellus
 Inscription

EUBOEIA

Chalcis, the Euripus
 „ Mt. Messapion

Chalcis: fort on the mainland
Achmetoga: Easter afternoon service
 „ kissing the Gospel
 „ hanging Judas
 „ Judas 'bursts asunder'
 „ end of the ceremony

IOS.

Inscription in Syra Museum

MELOS.

Rocks off N.W. promontory
Adamanta: from the anchorage
Tryptai, &c., from the harbour (panorama)
 „ from Adamanta road
 „ small boy singing St. Lazarus' song
Plakka: church
Kepos: church, exterior
 „ „ baptistery
 „ „ altar
Sta Nychia: obsidian in situ
Klivia (= *Hellenic city-site*) Panorama from Tryptai: site and harbour (four views)
 „ Akropolis and stadion
 „ „ and town wall
 „ Town wall
 „ Gate site
 „ „ „ polygonal wall
 „ Martza terrace (stadion?)
 „ „ „ retaining wall
 „ 'Three Churches Site' statues
 „ „ statue of woman
 „ „ torso of man
 „ „ statues
 „ „ architrave
 „ „ baptistery
 „ Theatre: view
 „ „ retaining wall
 „ Mosaic: general view
 „ „ altar end
 „ „ fish panel and altar
 „ „ birds
 Roman equestrian statue
 Small marble head
 Periante inscription
 'Cave Site'
 Oil-press of the Euryanaktidai
Tramythia: Dionysiac altar
 „ view of Plakka
Phylakopi. General view
 „ „ „ from S.
 „ „ „ „ E.
 „ „ „ „ N.
 „ „ „ „ S.E.
 Walls
 Caves
 „ Panorama from Myk. Palace from E. to S.W. (eight views in all)
 „ Panorama from Myk. Palace: E.—E.S.E.—S.E. (three views)
 „ S.W. corner: looking E.
 „ S. wall: looking N. from staircase

Phylakopi : S. Wall : postern gate
 „ W. end of site : looking E.
 „ View from mound : looking E.
 „ Regio III. : looking N.
 „ View of area D 5 : from N.
 „ Panorama from wall : E—S.—W.
 „ Excavation : interior of Regio I.

MYKONOS.

Hellenic watch-tower
 „ „ „ nearer view
 „ „ „ (another tower)
 „ „ „ view thence
 „ well-house

NAXOS.

Palati : gateway
Epanokastro : view northward
 „ Mediaeval ruins
 „ „ chapel
 Mt. Koronis
 Mt Zia or Ozia : Valley of Paratrekho
Mone : Chapel
Apollonia : general view from S.
 „ the inscription
 „ colossal statue : side view
 „ „ „ view from
 „ „ „ feet
Florio : unfinished statue : head
 „ „ „ side
 „ „ „ from feet
 „ „ „ from head
 Naxian colossal statue : in *Delos*
Pyrgos tou Cheimarrou : Hellenic watch-tower
Philoti : villagers

PAROS.

Stele from Paros, in Syra Museum

RHENEIA.

View from Cynthian Mount in Delos

SYROS.

Hermopolis : panorama from archway :
 N. half
 „ „ from archway :
 S. half
Old Syra : the Roman Catholic upper
 town
 „ (distant view)
 „ view down a street
 „ shipping : a Bombaro from
 Chios
 „ „ a Perama
 „ „ a Techanderi and
 Goelette
 „ 'La Caramienne' dance
 performed by Syriote
 butchers
Psariana
Potamos : a street in Hermopolis
Episkopio : view from the church terrace
 (inland)
 „ towards Rheneia

Museum : stèle from Paros, a poor man's
 gravestone
 „ inscription from Ios

TENOS.

Mt. Burgo and the Sanctuary of the
 Evangelistria
 Annunciation Festival (several views)

HELLESPONTINE AREA— THRACE AND MACEDON.

CONSTANTINOPLE.

The Golden Horn
 Hippodrome
 Seraglio Point and St. Sophia from N.
 Galata from S.

THESSALY.

Larissa : mosque. (a) (b)
Metora : Kalatakia, from the railway
 „ „ and H. Triada
 „ „ and H. Stephanos
 „ Kastraki, general view
 „ „ general view of
 „ „ monasteries
 „ „ and H. Barlaam, etc.
 „ „ and H. Rosane
 „ „ monastery of H. Barlaam
Ossa
Pelion and Volo
Peneios : valley at Baba
Tempe : up the valley
 „ another view
 „ view towards the sea
Volo and [*Pelion*]

CENTRAL GREECE

(between *Thessaly* and *Attica*).

Amphissa : view
Chaeroneia : the acropolis and theatre
 from E.
 „ the acropolis and theatre
 from N.
 „ the battle-field
 „ the lion
 „ „ head only
Delphi : General view from the E.
 „ View from S.
 „ Crissa and Kastri from S.W. from
 the Plain of Crissa
 „ View from Delphi looking E. to-
 wards Arachova
 „ View from Delphi looking W. to-
 wards Kirrhaean Plain
 „ Sub-structures of Peribolos, and
 Athenian Stoa
 „ Kastalian spring
 „ 'Logari,' the 'Gate of Hades'
 „ Rock-tomb below wall of Philo-
 melos

| | |
|---------------------|---|
| <i>Delphi</i> : | Reliefs in Museum |
| " | Theatre : general view |
| " | seats |
| " | Stadium : looking E. to starting point |
| " | " " " W. |
| " | " " " starting line |
| " | " supporting wall |
| <i>Euboea</i> , | see <i>Argoan Islands</i> |
| <i>Helicon</i> | from Lake Copais |
| " | " " Stris |
| " | Hieron of the Muses, view from Hill of Aspis to right |
| " | " " proscenium theatre |
| <i>Laphystion</i> , | Mt. |
| <i>Lebadeia</i> : | distant view with Mt. Laphystion |
| <i>Leuctra</i> | battle-field |
| <i>Parnassus</i> | from E. from the plain of Chaeronea |
| " | from S.E. from Stris |
| <i>Platæa</i> | plan of Boeotia from Kokla |
| " | battle field and Mt. Kirhaeron from N.E. |
| <i>Stris</i> | general view from S.E., Parnassus behind |
| " | " " " Helicon behind |
| " | Church of St. Luke, E. end (panorama : 2 views) |
| " | Church of St. Luke, S. side |
| " | " " " W. front |
| " | " " " N. wall |
| " | " " " Interior |
| " | courtyard |
| <i>Thebes</i> : | with the 'Cave of the Dragon' |
| <i>Thessophris</i> | general view |
| <i>Thespis</i> | site |
| <i>Tithorisia</i> | cave of Odysseus |

ATHENS.

GENERAL VIEWS.

| | |
|---|---|
| - | View from Munichia |
| - | Athens and the Parnassus from S.W. |
| - | Panorama from Parv (6 views) |
| - | Panorama from the Nymphs' Hill (3 pieces) |
| - | View from Museum Hill, looking N.E. |
| - | " " Kolonos |
| - | " " Lykabettos (single sheet) |
| - | From Lykabettos : Panorama (4 views) |
| - | View from the Acropolis, looking N. |

ACROPOLIS GENERAL VIEWS.

| | |
|---|---|
| - | From E. |
| - | " S.E., distant view from the Stadion with Olympieion |
| - | " S. (Turkish Period), from engraving |
| - | " S.W. (from Museum Hill) |
| - | " " with Frankish Tower |
| - | " W., from the Parv |
| - | " " " " |
| - | Church of Bombardier, W. front |

| | |
|---|--|
| - | From Nymph Hill |
| - | West front, entrance from W. |
| - | " " approach |
| - | The Turkish walls in course of demolition |
| - | From N.W. from Areopagus |
| - | " " " foot of Areopagus |
| - | " " " N.W. bastion |
| - | From the N.W. |
| - | " " with the Theseion |
| - | From N.E., from Lykabettos |
| - | " " " King's Garden |
| - | Grotto of Pan |
| - | Wall on N. side, hastily built with column-drums, etc. |

ACROPOLIS DETAILS.

Temple of Nike Apteros.

| | |
|---|--|
| - | From E. with Pelasgic Wall |
| - | From E. near view |
| - | S.E. corner |
| - | Turkish guard house, from S. (Odeum) |
| - | From S. (Odeum) |
| - | From S.W. with Propylæa and Pelasgian Wall |
| - | From N.E. |
| - | Seen between columns of Propylæa |
| - | Modern steps from W. (from below) |

Bastion of Odysseus.

View taken in 1859, (since destroyed)

'Pelasgic Wall.'

| | |
|---|-----------------------------------|
| - | From E. |
| - | " W. |
| - | <i>Propylæa.</i> |
| - | From the East |
| - | View through the door |
| - | From the top of the Parthenon |
| - | " S.E. from Kimon's Wall (S.E.) |
| - | " S.E. Hall (unfinished) |
| - | " S.W. from Nike Bastion |
| - | " S.W. from Nike Bastion |
| - | " The Pinakothek |
| - | " W. general view |
| - | " W. looking up from Beulé's Gate |
| - | " N.W. near view |
| - | " N. (showing Grotto of Pan) |
| - | N.E. N.E. Hall (unfinished) |
| - | Detail of S. doorway |
| - | Anta of prae-Periclean Propylæa |
| - | Monument of Agrippa |
| - | Perikles Inscription |
| - | Strongylion Inscription |
| - | Temenos : from S. |

Minor Monuments.

| | |
|---|------------------------------|
| - | <i>Artemis of Brauron</i> |
| - | 'Ge Karpophoros' Inscription |

Erechtheion.

| | |
|---|--------------------------------------|
| - | From E. |
| - | From S.E. |
| - | " S. with part of Old Temple from S. |
| - | " the top of the Parthenon |
| - | With foundations of Old Temple |

| | |
|---|--|
| From S.W. Karyatid Porch | |
| " " Karyatid Porch only | |
| " " W. | |
| " " showing the door | |
| N. door and Porch from E. | |
| N. Porch only | |
| the N. door only | |
| Excavation on N. side | |
| Details | |
| " kymation: fragment | |
| " bird and leaf | |
| * Archaeo-Ionic Capital found buried to | |
| the E. of the Erechtheion | |
| * Mycenaean column base, S. of Erechtheion | |
| <i>Parthenon.</i> | |
| From E. | |
| " S.E. (from top of the museum) | |
| " S.E. | |
| " S. side: foundations | |
| " S.E. corner | |
| " " corner only | |
| " W. (from Brauron Temenos) | |
| " " (from Temple of Nike) | |
| " N.W. | |
| " N., through Byzantine arch of Erechtheion | |
| " N.E. | |
| Interior, from E. | |
| " " S.E. | |
| " " S. | |
| " " S.W. | |
| " " W. | |
| " " N.W. | |
| " " top of S. wall, looking E. | |
| Colonnade, S. side | |
| " N. side, looking E. | |
| " N. side, looking E. | |
| " W. side | |
| " W. side, looking N. | |
| Details: capital of column (<i>Brit. Mus.</i>) | |
| " unmished drums | |
| " steps on N. side, showing curvature | |
| " " E. side, from N. | |
| " substructures, E. end, looking N.E. | |
| " " S. side, near to E. end | |
| " one of the setting-out marks, S. side, half size | |
| Turkish period, from engraving, E. end | |
| " " " " W. end | |
| <i>East Pediment.</i> | |
| Carrey's drawing (the whole) | |
| " S. end (view in Elgin room) | |
| " S. end, Carrey's drawing | |
| " N. end, (view in Elgin room) | |
| " N. end, Carrey's drawing | |
| " N. end, Michaelis, xvi. pl. 3 | |
| " 'Helios': horses | |
| " 'Theseus' | |
| " 'Fates' | |
| " 'Selene,' and horses | |
| " 'Hephaistos': torso | |
| " Female torso | |

| | |
|--|--|
| <i>West Pediment.</i> | |
| Carrey's drawing | |
| " N. end view in Elgin room | |
| " " and centre (Carrey's drawing) | |
| " S. end view in Elgin room) | |
| " " (Carrey's drawing) | |
| " Hissos | |
| " Kephissos': torso | |
| " 'Kekrops' and daughter | |
| " Poseidon': torso | |
| " Central Fragments | |
| " Pediments: ancient copies of the sculptures, Athens <i>N.M.</i> 200-2 | |
| " " of Parthenon and Olympia, together | |
| <i>Frieze.</i> | |
| Showing order of Panathenaic procession | |
| East: Artemis, Apollo; Hermes | |
| " Hermes to Ares: Michaelis xiv., 24-27 | |
| " Zeus, Hera, and Iris: Michaelis xiv., 28-31 | |
| " Head of Iris | |
| " Central group; Michaelis xiv., 32-35 | |
| " Athena and Hephaistos; Michaelis xiv., 36-37 | |
| " Poseidon, Dionysos, Demeter | |
| " Aphrodite, Eros, Elders | |
| " Maidens, Michaelis xiv., 49-56 | |
| North: Cattle, Michaelis xii., 3-6 | |
| " Sheep, Michaelis xii., 8-12 | |
| " Pitcher carriers, Michaelis xii., 13, 16-19 | |
| " Chariot group, Michaelis xii., 45-47 | |
| " " " Michaelis xii., 54-58 | |
| " Horseman, Michaelis xiii., 110-114 | |
| " " " Michaelis xiii., 115-118 | |
| " Youths and horses, Michaelis xiii., 130-134 | |
| " View from above | |
| West: Horsemen: (slab 39); Michaelis ix., 2, 3 | |
| " " youth, Michaelis ix., | |
| " Horse and man, Michaelis ix., 15 | |
| " Horse and youths, Michaelis ix., 22-24 | |
| " Horsemen (<i>in situ</i>) | |
| " Magistrates (slab 17) | |
| <i>ACROPOLIS (S. SIDE).</i> | |
| Columns with triangular capitals | |
| Thrasyllos monument (present state) | |
| " " (Stuart and Revett) | |
| Lysikrates monument | |
| " " Frieze | |
| <i>Dionysiac Theatre.</i> | |
| From Acropolis above | |
| " N.E. | |

| | |
|---|--|
| From N.E. | |
| " N. | |
| " N. with the two temples | |
| " E. | |
| " S. front view | |
| " S.W. | |
| " S. stage from E. | |
| " " of Phaedrus from E. | |
| " " details " " N. | |
| Remains of earlier stages | |
| Old Orchestra | |
| Priest's chair | |
| " " another view | |
| Inscribed seats | |
| " " three together | |
| Temenos of Dionysos: altar | |
| <i>Asklepion.</i> | |
| From E. | |
| Retaining wall of theatre | |
| Boundary stone | |
| Entrance to well | |
| Interior of well-house | |
| Cyclopean wall | |
| " pit | |
| <i>Eleusinion.</i> | |
| General view | |
| <i>Odeion of Herodes Atticus.</i> | |
| Interior from above | |
| Exterior from S. | |
| THE PRINCIPAL MONUMENTS | |
| OUTSIDE THE ACROPOLIS FROM | |
| E. TO S., TO W., AND TO S. | |
| <i>Arch of Hadrian</i> : from the S.E. | |
| " " N. with the Olympieion | |
| <i>Olympieion</i> : from S.E. | |
| " nearer view | |
| " from N.W. | |
| " Acropolis | |
| " N.E. from the King's | |
| garden | |
| " group of columns | |
| " marble Ionic cap found in | |
| the Temenos | |
| <i>Ilissos</i> : valley | |
| <i>Kallirrhoe</i> : Ilissos ravine | |
| <i>Stadion</i> | |
| <i>Monument of Philopappos</i> | |
| <i>Tomb of Kimon</i> | |
| <i>'Prison of Socrates'</i> | |
| <i>Pnyx</i> : General View from Nymph Hill | |
| " Bema: from E. | |
| " " " W. | |
| " Rock-wall from W. | |
| " Pelasgic houses at back of Pnyx | |
| <i>Excavations between Pnyx and Acropolis</i> | |
| " Altar of Temple of Dionysos | |
| " Wine-press | |
| " Junction of streets by wine-press | |
| " 13-foot road, looking S.E. | |
| " " drainage system | |
| " Altar of Dionysos 'en Limnais' | |

| | |
|---|--|
| <i>Areopagus</i> : From gate of Acropolis, from | |
| " Grotto of Eumenes, from N.E. | |
| <i>Nymph Hill</i> : observatory | |
| " " inscription | |
| <i>Theseion</i> : From E. | |
| " S. | |
| " S.W. | |
| " W. | |
| " N.W. Acropolis behind | |
| " N.E. | |
| Gate of the Market | |
| The Oil Market | |
| Tower of the Winds | |
| Stoa of Attalus | |
| Stoa of the Giants | |
| Stoa of Hadrian: exterior | |
| " " " W. end | |
| " " " interior | |
| " " " Mosque | |
| " " " and railway station | |
| <i>Dipylon Gate</i> , &c.: the gate itself | |
| " Wall of Themistocles | |
| " Street of Tombs: general view | |
| [For individual monuments see catalogue | |
| of <i>Grave Reliefs</i> hereafter.] | |

ATHENS: BYZANTINE.

| | |
|--------------------------------------|--|
| Metropolitan Church | |
| " " from S.E. | |
| " " from S. | |
| " " E. end, details | |
| " " from N. | |
| " " interior door to | |
| nave: from the | |
| narthex | |
| " " S. aisle, from the | |
| narthex | |
| " " from W. general | |
| view | |
| " " details of N. half | |
| " " from S. | |
| " " from S.W. | |
| Kapnikaraea Church: E. end | |
| " " S. side, from S.E. | |
| St. Theodore | |
| St. Saviour | |
| Asmaton Monastery: from Brit. School | |
| Architectural fragment (Byzantine) | |
| " ornaments (") | |

ATHENS: TURKISH.

| | |
|-----------------------------------|--|
| Parthenon from E. (engraving) | |
| " W. | |
| Guard house by T. of Nike Apteros | |
| Mosque near Hadrian's Stoa | |

ATTICA.

[Exclusive of *Athens*, for which see above]

DEKELEIA.

| | |
|---------------------|--|
| Tatoi: general view | |
| View from Acropolis | |

ELEUSIS.

- The Bay
 Eleusis and Salamis
 Hieron: Ground plan
 " General view
 " " view looking E. towards Bay
 " " view looking S.E.
 " " view from above looking N.E.
 " Greater Propylaea
 " " " with Temple of Artemis
 " " " Medallion
 " Sacred Way within Precinct
 " Lesser Propylaea, of Appius Pulcher
 " Lesser Propylaea, of Appius Pulcher: details of gate and capital
 " Temenos of Aidoneus [Pluto] from S.
 " Temenos of Aidoneus [Pluto] from N.
 " Substructures
 " " polygonal terrace-wall
 " " and gate (3 views)
 " from N.W. panorama
 " " single view looking E.
 " " S.W.
 " " S.
 " " N.
 " earlier column bases
 " later " "
 " " doorways "
 " " seats
 " Periclean Portico

ELEUTHERAE.

- General view from the Khan of Gaza
 Fort: exterior: showing five towers
 " interior

HYMETTUS.

- General view from Athens

IKARIA.

(*Sto Dionysio.*)

- Rapendosa valley and cave
 " cave
 View from the brow of Rapendosa
 Cliff: view towards Marathon
 " view towards the Pentelic range
 Ruined Church, untouched
 " pulled down
 Replica of a 'Marathonian Soldier'
 Votive victor's crown
 Relief from the Pythion
 Acroterion from the Choragic Monument
 with Christian crucifix cut in it

KEPHISSOS.

- Kephissos valley, and Kolonos

KERAMEIKOS.

- General view of necropolis
 ὄρος κεραμείκου inscription

KOLONOS.

- Hill of Demeter
 Kolonos and Kephissos

LAURION.

- Panorama (2 views)
 Ergasteria

LYKABETTOS.

- From S.E., British School in front
 " S.W.

MARATHON.

- General view: from N.E. with Pentelikon
 " " " Viana
 " " " N.W. looking seaward
 " " " The Mound
 " " " S. road
 Viana village

MUNYCHIA.

- General view from New Phaleron
 " " " Peiraeus
 Theatre: Dionysiac Altar
 " Trench through seats

OENOE (*Gyphtokastro*).

- General View
 Interior of Fortress (2 views)

OMORPHI.

- Byzantine Church

OROPUS.

- Amphiarion: theatre, from N.W.
 " " seat of priest
 " " proscenium

PARNES.

- View from Athens

PEIRAEUS (including *Eetioncia*).

- View from a steamer
 " " Munychia, with Zea and Salamis
 Panorama from mouth of harbour
 Harbour: outside
 " inside
 Fortifications on Akte
 Walls and gate
 Gateway showing ancient ruts
 Eetioneia: fort
 Ancient theatre
 Long Walls

PENTELIKON.

- General view from W.
- Convent " " S.W. from Munychia
- Quarries
- View near summit : looking upwards
- View from summit towards Athens
- " " " " Marathon

PHALERON.

- The Bay, with New Phaleron, looking N.E.
- The Bay from Athens, looking N.E.
- Old Phaleron

PHYLE.

- View over Attica to S.
- General view from N.
- Near view : tower and wall
- " " east tower
- " " entrance

SACRED WAY.

- Rheitoi, looking N.W. along road to Eleusis (2 views)
- Pass of Daphne
- Temenos of Apollo and votive niches
- Convent

SALAMIS.

- and Psyttalei over Peiræus
- View from entrance of Peiræus looking E.
- View from entrance of strait
- Bay of Salamis
- Panorama, S.W., from slopes of Aegaleos (19 views in all)
- Kynosoura : from mainland from 'Xerxes' Seat
- View from N.E. angle of the Bay looking E. towards Kynosoura and the Arsenal
- Shoal : Island of St. George, Kontouri Hill, etc
- Greek arsenal, and opening to Bay of Eleusis
- Eleusis in distance, from opposite the arsenal
- W. end of the bay : narrowest part
- View from Eleusis, looking S.W.

SOLUNION.

- General view of Cape Columna
- Temple : near view
- " " from E.
- " " S.E.
- " " W.
- " " N.
- " " N.E.
- " " interior from E.
- View from Temple

THORIKOS.

- Theatre (2 views)

ZEA.

- General view, from E., with Peiræus and Salamis
- Harbour
- Theatre (2 views)
- " " orchestra and stage
- " " seats

MEGARIS.

- Megara : Easter Tuesday dance, 1889 (6 views)
- Skiroman Rocks, general view, looking W.
- " " nearer view, looking W.

PELOPONNESE.

- [Principal Districts, and Sites within each, in alphabetical order.]

ACHAEA.

PATRAS.

- General view
- Another view

POSTITZA.

- Three views
- Currant factory

ARCADIA.

ALPHEIOS.

- Gorge at Karytiena

ASEA.

- (Francorivisi) : distant view
- Acropolis
- " " another view
- " " walls

GORTYS.

- Site of Gortys

KARYTAENA.

- * Distant view from S
- Castle : view from E.
- " " from interior of town
- " " interior
- Frankish bridge : from E.
- " " " " W.
- Gorge of Alpheios
- Plain of Megalopolis : from castle

LYKOSURA.

- Temple of Despoina

MAINTINEIA.

- The batt'chold
- River Ophidi

MEGALOPOLIS.

General view of the plain from Kary-
taena
Mound: from N.W.
Temenos of Zeus Soter: theatre in dis-
tance
" " " looking S.E.
Theatre: general view from back of
stage building
" looking across scena
" from W. wing
" seats
" stage
" walls
Excavations (several views)
Modern village: market place
" " street (and other views)

TEGEA.

The battle-field: general view
Temple of Athene Alea
" heads by Scopas [*Athens N. M.*]

ARGOLIS.

ARGOS.

Citadel (Larissa)
Theatre

EPIDAUROS.

General view from summit of theatre
Theatre: distant view
" general view from in front, N.
" orchestra and cavea: from top
" " " from E.
" seats: from below
" part of the ring
" stage buildings: in front
" " in profile
Temple of Asklepios: foundation
Temple of Artemis
Tholos: distant view
" nearer view
" Corinthian capital
" details of moulding
Roman Odeion (theatre behind)
Cyclopean bridge on road to Nauplia

HYSLIE (Akhlodokampo).

General view
" bit of wall

MYCENAE.

Plan of lower town and Acropolis:
Schuchhardt (see Slide Catalogue)
General view: from near Phictia
Acropolis: general view from the W.
" S. side, with Chadros ravine
" wall and tower below Lion
Gate
Lion Gate: outside
" " inside
Shaft-graves and Circle
" " near view
" Gate of the Circle

Gallery leading to Well, in N. wall
Postern Gate
Acropolis: Palace walls
" " staircase
" " megaron, from door-
way
Treasury of Klytaemnestra
" (completely cleared)
" interior
Treasury of Atreus: before excavation
(from engraving)
" " dromos
" " interior
" " roof
" " inner door

NAUPLIA.

Panorama (2 views)
General view: from N.
" " E.
" " from the anchorage
Main Gateway
Street leading from the Square to the
Gate
Principal Square
Easter Lamb Market
Itch Kale: from S.
Palamidi fortress
Nemea: Temple of Zeus

TIRYNS.

General view: W. side of Upper Citadel
" " from Lower Citadel
West wall: looking N.
East Gallery: view from entrance, look-
ing N.
South Gallery
Staircase to Postern: from wall, looking
N.
" " from without
Main Entrance: external Ramp.
Flanking Towers
" the inner doorway
Upper Citadel: view N. from the Bath-
room
View, N.W. from the Bath-room
Auto-base from Great Propylaea, showing
saw-cuts

CORINTH.

Acro-Corinth and Temple from N.
" " Entrance
" " Old Fortifications
" " View from the top: look-
ing S.W.
Temple from E.
" " S.
" " S. nearer
" " N.W.
" " N.E.
Isthmian Canal from railway bridge
looking E.
" looking W.
Isthmian Canal: E. end from Kalamaki
" " and Kalamaki looking S.
" " view from water level,
looking W. (2 views)

ELIS (*including Trophæon*).

PHUCALEIA.

- Temple from S.E.
- „ „ S.
- „ „ S.W.
- „ „ W.
- „ „ N.W.
- „ „ N (2 views)
- „ „ N.E. (2 views)
- „ interior from S.
- „ „ „ S.W.
- „ „ „ N.W.
- „ „ „ S.E.

OLYMPIA.

- Panorama (in three pieces)
- General view of Ruins from Museum
- View with Kladeos Riv.
- Heraion from S., with Kronos Hill
- „ „ E.
- „ „ S.E.
- „ „ W. from Gymnasium
- „ „ N.W.
- Temple of Zeus: from N.E.
- „ „ „ N.
- „ „ „ S.E.
- Treasures: retaining wall behind terrace
- The Palaestra
- The Echo Portico
- Stadion: N.W. entrance
- „ „ E. goal

LACONIA.

EUROTAS.

- Source at Kephalaivysi
- View from Sparta towards Parnon
- „ „ „ Taygetus
- „ „ Vryllas

GYTHÆION.

Harbour

MISTRA.

- Distant view from Sparta
- Ruins: approach from Sparta
- „ from Pantanassa
- „ looking to N.
- „ Church of Pantanassa
- „ „ of Zoodochos Pige
- „ Ruins called the Princess's Palace
- Castle: interior of entrance

PARNON.

- View from Sparta, up Eurotas valley

SELLASIA.

Sellasia valley

SPARTA.

- General view looking S.
- Looking W. with Taygetos.

- Market-place: looking towards [Taygetos]
- Roman Ruins: N. of the Modern Town
- Theatre: supporting wall
- „ „ cavea
- 'Tomb of Leonidas'
- Museum, the 'Omphalos' relief
- „ „ an Amazon, etc.

TAYGETOS.

- View from Market-place of Sparta
- Gorge in the range
- Langada Pass: entrance at Trypi
- „ looking E. Parnon in distance
- „ Three views in pass
- „ View from summit, Mt. Rindomo
- „ Mt. Pigadia

MESSENIA (for *Trophæon* see *Elis*)

ITHOME.

- General View
- Walls of Epaminondas
- Arcadian Gate
- „ „ interior
- Katholikó Monastery

PYLOS AND SPHACTERIA

- Panorama: from Neokastro, modern Pylos: (3 views)
- „ „ from the bay
- Pylos: from Sphacteria, looking N
- „ (Palacokastro) N. end
- „ „ S.E., from Sandbar
- „ „ S.W., 'Brasidas'
- „ „ rocks (2 views)
- „ Wall L: distant view
- „ „ near view
- „ wall behind L (in Grundy's map)
- Sphacteria: cliffs
- „ Wall BB. N.W. corner
- „ „ S.W. corner
- „ Wall CC
- „ „ D
- „ south end: from the bay

WESTERN GREECE.

ITHAKA.

- Vathy: modern town from the sea
- „ Bay: entrance
- Dexia Bay: 'Harbour of Phorkys': from S.
- Mount Aetos: from Pissaeto Bay, looking S.
- „ „ 'Castle of Ulysses': looking up the slope

ITALY.

CROTON.

- Column of temple, from the N
- Peribolos: wall of sanctuary

6114

METAPONTUM.

Doric temple 'Chiesa di Sansone'
Doric temple 'Favola dei Palladini,'
looking N.

PÆSTUM.

General view of the temples
Temple of Poseidon
" " from S.W.
" " " S.E.

TARENTUM.

Archaic Doric column

SICILY.

AGRIGENTUM.

General view, looking N.W. from Temple
of Zeus
Cyclops: rocks

MESSANA.

General view of harbour and strait from
W.

PANORMUS.

Palermo and Monte Pellegrino from E.

6115
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SYRACUSE

Panorama: N.-N.W.-W. from Great
Harbour
Town and Great Harbour from Euryelos
Anapus River: papyrus stems
Foundations of iv. cent. wall by the
cemetery
Ortygia from within the harbour
" and Small Harbour from N.
Fountain of Arethusa: general view
" " nearer view
Temple of Artemis
Eppolæ: ravine in cliffs on S. side
" cliffs on S. side, E. of Euryelos
" from E., general view
" moat from N.
Latomie: quarries
" 'dei Cappuccini'
Old rock-cut road, with tombs, above
Theatre
Theatre, from below
" auditorium from W.
" stage buildings from W.
Roman Amphitheatre

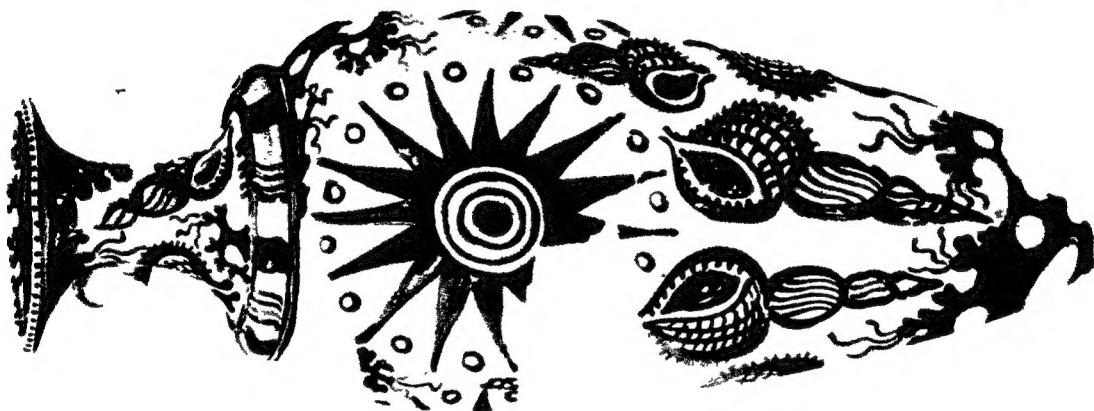
TAORMINA.

Roman Theatre: overlooking stage

3

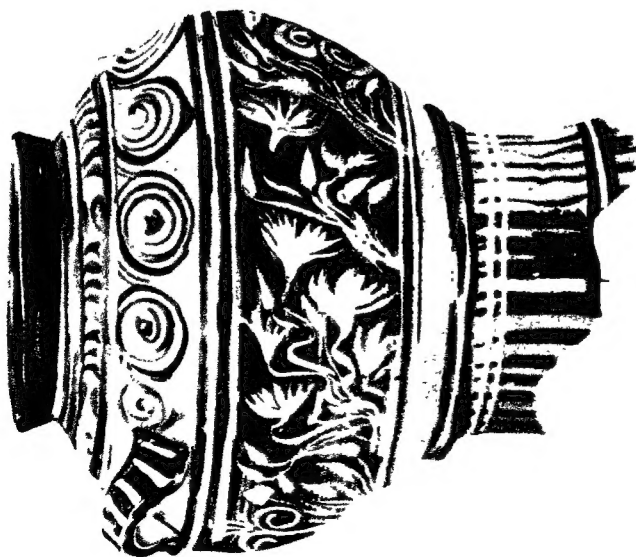


FROM ZAKRO, CRETE.



BRONZE-AGE VASES

2





N. J. 

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